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THE UNIVERSITY OF ALBERTA

TALKING ABOUT MY BODY: BEING AND LANGUAGE

by

DONNA PATTERSON

(C)

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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God guard me from the thoughts men think
In the mind alone.
He that sings a lasting song
Thinks in a marrow bone.

William Butler Yeats
The King of the Great Clock Tower

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled TALKING ABOUT MY BODY: BEING AND LANGUAGE submitted by Donna L. Patterson in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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ABSTRACT

This study examines the impact of language on our efforts to understand and talk about our bodies as living wholes. The focus is then on internal criticism as a necessary (albeit not sufficient) first step in those efforts.

In particular, the study examines the wholistic metaphor, how it has been used and how it must be used to realize its intent and power. Phenomenology (the work of Husserl and Merleau Ponty) and general systems theory (the work of Werner and Vygotsky) come under review.

The review indicates that to realize the metaphor, I must focus on, return to the body, my body and return to a sense of myself as a verb - being, breathing, moving always doing something. I must speak of the body, my body not only as active but as particular, as personal, as somebody. By doing this, I empower the body, my body. I recognize the body, my body as my total being and not just my physicality. I must remember to focus on the whole, the body, my body not on a part (neither consciousness nor language). I must consider the possibility of using a new "unit of analysis" a la Vygotsky. To do this is to recognize the body, my body as the essential context for understanding my own living nature.

NOTES TO THE READER

Whatever we call reality, it is revealed to us only through the active construction in which we participate.

As humans we are constantly trying to map our world, to come to know ourselves. It is a map constantly being redrawn. Continually we are shifting, refining and reshaping our understanding of who we are, of who we are in relation to the world and to those around us. We use language * as a means to chart those journeyings, so that we can see where others have gone so that we can remind ourselves of where we have been and so that we try to see where to go next. We use it everyday, use it confidently as a shared map, use it without remembering it is only a map. Its life and power come from us. We are the agent. As with any tool it challenges us to learn how to use it in ways that extend and enrich us. As with any map, we must be open to redrawing it, to consciously changing it, to reworking it in our effort to chart and rechart our sense of ourselves, our world and our place in it. In charting and recharting we become self conscious. Shared public space, the taken for granted must become private, be re-personalized, it must be re-invented. It is only as an explorer that the world can be discovered anew.

* and by extension metaphor

This paper asks that we look again at our map, look at how we have drawn it. In particular it asks that we look at how we have used the wholistic metaphor, to see how we might better do so. This request to look again, to use the metaphor self consciously is prompted by a belief that doing this is one way of "consenting to lose sight of the shore" one way to discover or some would say create ourselves anew.

Within this paper, tne reader may become aware of an inherent tension between different disciplines - on one hand, psychology with its experimental paradigm and on the other, the philosophical definitional paradigm. While psychology does attempt to be clear and precise in its definitions there is still not the same attention to premise and definition which is a central concern of the philosophical tradition. It might be said that philosophy is a search for an absolute and psychology one for relation. Perhaps this is simplistic, regardless, mixing these two paradigms results in tension. I have chosen to live with this tension (I invite the reader to do so) in hopes of creating a less confining space in which to explore. Arising from this tension, there is, of course, a self-consciousness; at moments, a certain awkwardness and messiness that come with all new ventures.

I am making use of the literary essay as a home congenial to metaphor and as a meeting place for both the philosophical and the psychological paradigms. It encompasses and allows the tension I spoke of earlier and it acknowledges the role of myth and story, and by extension language and metaphor, in our telling ourselves about who we are. It permits me to both invite and challenge the reader to share in my venture in ways not open otherwise.

I have self-consciously used language throughout to remind myself and the reader of points easily forgotten. Consistently and intentionally, I speak of the body, my body. I have done this as an acknowledgement. The body, my body can never be an object, can never be spoken of correctly as an "it". The body, my body is always particular, always personal. To speak correctly, I must speak about me. As well, I have consistently used the "w" when speaking of "wholism" or "wholistically". This is intended as a reminder that the root of these words is "whole". It is to override any tendency to slip into a connection with "hologram" or "holograph".

I have written this paper in full recognition and appreciation that

> Writing is no longer (if it ever was) the simple enunciation of what one has conceived. It is working with a tool which at times produces more and at times less than one has put into it, and this is simply the result of a series of paradoxes that make the writer's craft an exhausting and never ending one (Merleau Ponty, 1968/1970, p.13).

Those readers seeking coherent theories or empirical data must look elsewhere. I do not promise answers. What I promise is fairly straightforward. It is to undertake the explorer's and thus the writer's task. I want to turn away from dead ends, avoid unproductive thoughts and analyses, I want to re-orient, to point in a new direction, to suggest a new starting place to begin remapping or (to know for the first time) the body, my body, your body.

In approaching this task I draw on the work of Rorty, Ryle and Israel in that I focus on talking about how we talk about the body, my body. So the how of this work (or my methodology) is not new. What is different or new, what may encourage even foreshadow the re-orientation I am in search of is what I want to talk about. I have deliberately chosen not to talk about the body, my body as an object, something viewed from a distance, nor as an artistic, creative or expressive vehicle rather I want to talk about breathing, moving, dancing and what it means that I breathe, move and dance, in other words, what it means to be self-referential.

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INTRODUCTION

I want to give you a sense of why I have undertaken this study. This introduction is a point of departure; it grows out of my experiences and is marked by a number of philosophical issues. What follows acknowledges both.

I have danced most of my life except for short periods of withdrawal for one reason or another. So movement has been central in my life. Something occurs when I move that is quite different than at any other time, quite unique in my experience. There is a fusion. I am at one with myself, I am of a piece. This is a very powerful, dare I say it, moving experience. To use dance jargon, and interestingly enough psychological jargon (by adoption), I am centered. My research question evolves out of a respect for this sense and the difficulty I experience in describing and sharing it.

As you may be able to tell, I am really dealing with two issues guised and merged as one. I am taking on the nature of language, a two thousand year-old philosophical argument which remains unresolved, but I am only taking it on in an effort to get at, or more properly, to address my central concern. Formally stated, that concern is, how do we adequately think of ourselves; or stated more informally, how do I adequately come to understand my own living nature ... the sense of wholeness mentioned earlier.

In my efforts to describe my experience in dance, it has become evident to me that it is not easy to use language, a universal, to express the particular; and that which is lived is always particular (if not personal and private) to the individual who lives it. Commentators even suggest that the use of language to say something true always results in distortion. While language may make it difficult to express my experience, it is still important to try and, in the attempt, to establish how language helps or hinders my efforts to express, to embrace, my own living nature, my own wholeness.

CHAPTER I

The Body, My Body

The Problem

In the course of my studies, I have been trying to understand and conceptualize my relationship with my body; that is, the part my body plays in my understanding of myself and my world. How I experience the living nature of my being and, as importantly, how I talk about and express that experience has emerged as the central question in my pursuit. I want to examine the impact of language on our efforts to understand our bodies as living wholes.

Let me restate what I am trying to do. My discussion takes place on a third metalevel.[1] It combines a primary focus on the body (first metalevel) with one on the relationship between language and the body (second metalevel) by looking at how we use language to talk about the body, about ourselves as living wholes (the third metalevel).

With this focus, Chapter I poses my question and the framework of the study. Chapter II examines the central organic metaphor. Chapters III and IV critically analyze contemporary and leading theories that focus on the body wholistically. The last chapter draws together my findings and offers thoughts on what we might do to better speak of ourselves, our bodies as living wholes.

I will begin with the body, my body as my primary focus and return to it, in hopes that

> ... the end of all our exploring
> will be to arrive where we started
> and to know the place for the first time.
>
> (Eliot, Little Gidding)

The Framework

The framework for this study acknowledges each of the metalevels present in my central question (the body, my body; language as a tool and talking about the body, my body; the Cartesian inheritance[2]). Each of these metalevels will be examined in turn.

The Starting Point: The Body, My Body

> A living whole is always transcendent to its parts and its character cannot be inferred from the character of its parts. Moreover, the structural adaptations and the dynamics of the system as a whole provides the framework for the behavioral characteristics and activities of the parts.
>
> (Zeleny, 1980, p. 20)

The option always exists to believe that attempts to understand or verbalize this unity of being of which Zeleny speaks are doomed to failure. Taking a romantic view (Best, 1974), some commentators suggest that such failure is unavoidable. The irreversibility of evolution makes one kind of consciousness, the verbal, analytical, "the said",

unable to comprehend another, in this case, the non-verbal, wholistic or "the unsaid" (Geertz, 1973, 1983; Whitehouse, unpublished paper). It has even been suggested that an effort to express in words this unity is a final expression of alienation from the self (Tyler, 1978). Still the experience of something as meaningful and integral as my body cannot be left to sit unattended, unaddressed - to bask in silence, in pure significance. It begs for exploration, understanding and expression.

I begin with the idea presented in the quotation by Zeleny -- that I am more than a sum of parts and that the more is the framework for understanding those parts. I am my body[3] ... a unity, a totality, a living whole. In my totality are interwoven my physical and psychological aspects. It is essential to remember that I am not a series of parts or an assortment of aspects strung together. My body is more than form, function or even the interplay between these two. My body expresses simultaneously extensive outwardness through substance and function and intensive inwardness through consciousness and expression. To repeat, my body is myself, my wholeness. This wholeness is actively self-integrating, and form[4] for once is the cause rather than the result of the material collections in which I subsist.

Such a claim, as the one reflected in the passage above, demands that I acknowledge my body as both constitutor of my being and means of understanding it, as

both source and instrument in knowing myself. I must/want to examine and explore the implications of such an acknowledgement. The query "Why bother?" is best summed up by Hans Jonas (1966) in his book, The Phenomenon of Life: Towards a Philosophical Biology.

> The living body that can die, that has world and itself belongs to the world, that feels and itself can be felt, whose outward form is organism and causality and whose inward form is selfhood and finality: this body is the momento of the still unsolved question of ontology, "What is being?" and should be the canon of coming attempts to solve it (p. 19).

In spite of marked advances in our knowledge of the anatomical body, the concept of the living human body remains unclarified (Spicker, 1970). The question remains how to do so.

The Approach: Language As A Tool

The idea that I am a whole or that I am my body finds echoes in other work (Marcel, 1927; Merleau Ponty, 1945; Stern, 1938; Werner, 1926). Each has struggled with the implications in these statements. My point of departure is a most elementary notion, so elementary that it seems to have been used by few commentators for exactly that reason:

> In order to speak about anything, we must possess a language[5] and be able to use it in a correct, i.e., non-contradictory and non-arbitrary way (Israel, 1981, p 10).

When we speak in this way, we can no longer use the conjuring trick -- to use Wittgenstein's expression (1953, p. 308): the trick which consists of saying that obviously we know that we possess language, so why bother about what this very fact implies; when we could use the time better to talk about other things, like the body, my body.

My approach rests on the premise that language[6.1, 6.2], as an expression of cultural belief systems, directs and shapes our ways of analyzing knowledge and our inquiry into basic problems of knowledge (Israel, 1981). Our understanding of our bodies and their significance to us is no exception. We cannot talk about our bodies without having some knowledge of them (after all we live them) and at the same time we cannot speak without acknowledging the cultural framework within which our understanding is couched.

We usually do not problematize the notion of possessing a language and for this reason take it for granted "hat we kan star" into our questions <u>immediately</u> without first becoming aware of the presuppositions involved. We thus fail to grasp that the formulation of these questions ought to be moderated by an analysis of the language commonly used to talk about these questions. The task is, then, no longer that of explaining causal relations but becomes in the broadest sense, that of dealing with how we use language, and how we have to use language in order not to contradict ourselves, or make our

speech senseless thereby confusing and muddling our efforts to talk about our bodies as living systems, as wholes.

An Application: The Cartesian Inheritance

This particular approach, to start an investigation with an analysis of language-acts, has been used to demonstrate that the dualistic treatment of "the body"/the invention of "the mind", usually attributed to Descartes, represents a basic problem within the logic in language (Rorty, 1980; Ryle, 1963; Israel, 1981, 1972).[7] The dualistic tradition treats both thoughts and bodies as if they had extension in space, as if they were both substances, as if we could point to our thoughts in the same way we can point to our bodies. Since mental processes or "mind" and physical processes or "body" are not the same logical type, to discuss them in the same manner is to commit a category mistake. Nonetheless, this category mistake, that we are two distinct substances, body and mind, remains with us as a strong and pervasive cultural tradition. Our language makes it difficult to keep from thinking of a body as a thing and a mind as a thing and both of them as considerably different entities. If we were to we say that we do our running with our run or our swimming with our swim, we would be reasoning in the same way we do when we say we do our minding with our mind or our thinking with our think. Minding and thinking are processes that take the whole being, as do running and

swimming (Gunderson, 1971). We do not often question when we read that a human is composed of mind, body and spirit.[8.1, 8.2, 8.3] Yet such a statement is an explicit expression of dualism, of the Cartesian inheritance. This inheritance affects not only philosophy, but also all sciences dealing with humanity and in particular, psychology (Bruner, 1984).[9]

Our knowledge of our bodies is affected, colored and limited by the cultural tradition of dualism in direct and subtle ways. If the mind and body are considered separate, then the body may be considered the enemy of reason and subsequently disparaged. If the mind and the body are viewed as having only a contingent relationship, then the body is viewed as subservient to the mind (Fairs, 1968). If we speak of the mind and body as integrated, then by implication there is someone who is an integrator and who can accomplish this integration. It is not clear whether the someone is mind or body; it is clear only that the one who is integrating also happens to be one of the fragments (body-mind) in need of integration. If the body and mind are considered a unity (in the sense described earlier), then our "embodiment" acts as a point of departure, a new way of thinking about ourselves.

This new way of thinking tries to break with dualism and approach "the body" as a living system, as a whole. Yet thinkers who believe that humans are unified beings, integrated wholes, often resort to dualistic terminology

and phrasing. Care must be taken to avoid the seductive dualism implicit in a language which permits us to speak of "having a body" (as if the possessor and the possessed could possibly be different entities).[10]

Best (1974, p. 54), in his discussion of the part played by language in speaking about "the body", suggests that thinkers who do not wish to resort to dualistic phrasing must avoid succumbing to three tenacious presuppositions about meaning. We must avoid using language as if we believed that:

1. The meaning of a word is isolated and rigidly fixed.
2. Naming is the primary function of words in language.
3. The meaning of the word is an object.

My task then becomes not merely to examine how I use language to speak of my body. Not only must I recognize basic problems in language usage as a prior condition to any further analysis but also I must find ways to prevent my falling into the presuppositions about meaning presented by Best.

In Summary

I am trying to understand the body, my body in its integrity.[11] The obvious place to start is with writers and theorists who share this intent. In determining how language might best be used to explore and come to understand my body, my own living nature, I must first

recognize how basic problems in language usage have undermined earlier efforts to do so. Following Rorty (1980), Ryle (1949) and Israel's (1981) suggestion, I am reviewing these efforts for inherent dualism, for problems in basic language usage, for root metaphors (Pepper, 1942/1970, Reese and Overton, 1970) as an initial step in a search for a way to further realize my intent.

To restate, this study will examine how language must be used to clearly, coherently, consistently and intelligently speak about our bodies as living wholes. The focus is on internal criticism as a necessary (albeit not sufficient) first step in an evolving attempt to better understand our own living nature.

CHAPTER II

Wholism and My Body

Living a Metaphor

I have said I want to find a way to understand and to talk about my body as a living whole[1.1, 1.2]. As is the operative word. It signals that I am in the presence of metaphor[2].

Metaphor is often regarded as a device for embellishing discourse, but its significance is much greater. For the use of metaphor implies a way of thinking and a way of seeing that pervades how we understand our world generally. There is a growing literature demonstrating the impact of metaphor on the way we think, on our language and on systems of scientific and everyday knowledge.

From a historical perspective[3], Aristotle[4] provides the first extended philosophical treatment of metaphors. He was the first to identify the role of metaphor in the production of knowledge. In his Rhetoric, he suggests that "midway between the unintelligible and the commonplace, it is metaphor which most produces knowledge." In the early sixteenth century Vico (1969) was the first to recognize the importance of metaphor as a mode of experience and hence as having more than figurative significance. While a number of philosophers in the nineteenth century mention the importance of metaphors, for Nietzsche it is central. He refuses to separate metaphor from "proper words." For

him, metaphoric understanding is essential to all knowledge, what we know we know metaphorically. As Nietzsche says himself, ...

> What therefore is truth? A mobile army of metaphor, metonymies, anthropomorphisms ... truths are illusions of which one has forgotten that they are illusions; worn-out metaphors which have become powerless to affect the senses ... (1873/1874, p.180)

The work of twentieth century philosophers such as Cassirer (1946), Wittgenstein (1958), and others further emphasize language and other modes of symbolism in reality construction. It is largely through their work that these ideas have begun to influence psychology.

In simplicity or in sophistication, we tend to think in metaphors, drawn from our social and personal experience. In our search for ways of making sense of our world, we try a host of different possibilities to find those that are helpful and acceptable. Our metaphors indicate an important analogy between two things, usually without saying explicitly in what the analogy consists. To consider A from the point of view of B is to use B as a microscope with which to view A differently and more closely (Turbayne, 1970). In this way B becomes a screen through which we see A; it filters some part of A and allows us to perceive others. A problem with metaphors is that the screening and filtering process of B might not allow us to see some essential parts or qualities of A

because B becomes not an illumination of the essence of A, but a mask or disguise for A.[5]

For example, when we say, "The man is a lion", we use the image of a lion to draw attention to the lion-like[6] aspects of the man. The metaphor frames our understanding of the man in a distinctive yet partial way. In drawing attention to the lion-like bravery, strength, or ferocity of the man, the metaphor glosses the fact that the same person may also be a devil, a saint,[7] a bore, or a recluse. Our ability to achieve a comprehensive "reading" of the man depends on our ability to see how these different aspects of the person may co-exist in a complementary or even paradoxical way.

It is important to recognize that every metaphor is limited and gives a certain perspective on its subject. This limitation of metaphors is no reason to reject them but speaks to a need to examine carefully the metaphors we hold and to use them cautiously. Unfortunately, metaphors are not usually tied in with processes of deliberate criticism. We must remember that where there is a metaphor there will be conflict in understanding because the metaphor only represents the thing; it is not the real thing (Goodman, 1968). Therefore, our metaphors can never be literally or actually true.[8]

It is important also to realize that metaphor is not an argument and does not rest on reasons. If one thinks a metaphor is inadequate, arguments and reasons tend to be

ineffective, because any empirical evidence or any argument is also conceptualized in terms of the underlying metaphor and so can carry little force against it. To someone whose thinking is structured by a particular metaphor, the metaphor cannot be seen as inadequate, because it is what determines how things are seen; some other image does not exist for that person against which she or he can compare his or her understanding. We do not have ideal forms against which we can measure the adequacy of our metaphors, we only have our metaphors, and they determine how we see and make sense of the phenomena in question.

This obviously is inadequate too, or else we would not be able to escape from a metaphor, and clearly we sometimes do.[9] Morgan (1986) suggests that there are two main strategies pursued by those who consider a metaphor to be inadequate. The first is to point insistently at precisely those aspects of the phenomena it deals with least adequately, and the second is to offer a quite different metaphor that deals not only with those phenomena covered by its competitor but also with those its competitor deals with least adequately. I think that before taking either of these steps we must learn to use the metaphor well.

The wholistic or organic metaphor is one way to understand our own living nature. In order to use it well, we need to understand its strengths, its limitations -- the parameters which delimit its usefulness. If we are to understand what we construct for ourselves we must develop

a sense of what the metaphor offers us but perhaps most importantly we must know how we can and must use language to most closely realize its intent, its power. The only way to come to these kinds of understanding is to look at how the metaphor has previously been used -- to look at the metaphor at work in existing efforts to talk about our bodies as living wholes.

Reviewing Existing Efforts

There has been a long-standing "disquieting ambiguity" about our relationship with our bodies. This relationship has most often been discussed within the context of the body/mind problem -- a problem which has fascinated men and women throughout the ages. The problem has re-emerged over time as a topic of discussion among experts from various disciplines including psychologists, physicists, philosophers, neuroscientists, artists and representatives of mystical traditions.[10] While the nature of individual humans seems to have remained more or less constant over thousands of years, the answers proposed to the problem have varied greatly over time and according to geographical location. These discussions and answers have been very stimulating but have also created considerable confusion.[11] Much of this confusion may be said to be generated through the language we use, through the basic "presuppositions" in terms of which the problem is formulated and of which the answers are proposed.

Traditionally philosophical interpretations of the body/mind problem have either tended to be of a cosmological or material, of a theological or spiritualistic, or of an ontological or humanistic nature (Osterhoudt, 1981, p. 9). Shalom (1985) suggests that many commentators have fallen into what he characterizes as "the body-mind conceptual framework" i.e. thinking in terms of "body" and "mind" on the presupposition of their being the basic philosophical concepts and ground for being as being either one or the other or the duality of the two. Both the materialistic and spiritualistic interpretations offer a dualistic resolution of the problem in that the body and the mind are considered as distinct, independent substances which interact with or accompany one another. Within materialistic interpretations, the mental is reduced to, or explained in terms of the physical; the material unthinking body reigns over the immaterial thinking mind. Within spiritualistic interpretations, the physical is reduced to and explained in terms of the mental; the mind reigns over the body. The body is seen as something to which one is temporarily attached and that which must be overcome for human fulfillment. Whether expressing one of these extremes in pure form or combining them, i.e., taking an intermediate position but always somewhere along the axis between the two poles, the materialistic and spiritualistic theories on the relationship between the body and mind constitute a confining circle.

Along with both the materialistic and spiritualistic traditions, rooted in ancient Greek, Hebrew and Asian philosophy, there has been the humanistic tradition or interpretation. Fromm (1967) suggests that it is most popular whenever the prevailing system has undermined human dignity (and in its modern form, humanism, is largely a reaction against behaviorism). The humanistic interpretation provides a monistic view of the body/mind problem, one that preserves the intrinsic character and identity of the body and mind and reveals the harmonious unified relation between them, one that focuses on wholism. According to this interpretation, a subjective notion of the body is advanced, one in which the body is seen as what one <u>is</u> rather than merely something one <u>has</u>. For many commentators, this orientation holds both a promise and a solution, certainly a re-phrasing and refocusing of the problem.

Perhaps the most interesting of recent humanistic approaches to the study of "the body" have been made by contemporary phenomenologists and those commentators who have taken a general systems perspective. This study will look at the refocusing, the re-phrasing, the promise in these approaches. It will look at how language usage obscures and obstructs the realization of this promise. A critical examination will be made of the phenomenological perspective as presented by Merleau Ponty (with a look at Husserl's influence) and the general systems perspective as

presented by Werner (as reflected in Vygotsky). These perspectives are chosen for review since they represent attempts to heal the body/mind dualism, to speak about ourselves as living wholes.

CHAPTER III

Phenomenology and My Body

Making a Documentary

Phenomenology approaches the body/mind problem by suspending theoretical preconceptions and customary categories and by trying to see people and things as they really are. This approach is probably best summed up by the following:

> No opinion is to be accepted as philosophical knowledge unless it is seen to be adequately established by observation of what is seen as itself as given "in person." Any belief seen to be incompatible with what is seen to be itself given is to be rejected. Toward opinions that fall into neither class -- whether they be one's own or another's -- one is to adopt an "official" philosophical attitude of neutrality (Cairn, 1940, p. 4).

Consistent with other humanistic interpretations, phenomenologists generally regard the body and the mind as a functional unit. It is one's "embodied" or physical presence in the world that allows one to have the experience of being (Gerber, 1979, p. 182; Shrag, 1969, p. 133). Conversely, it is by virtue of my "embodiment", through my sense experience, that the world is exposed/revealed to me.

There is in this view an attempt to fuse the empirical and transcendental. Any delineation depicting being as solely an intellectual interiority (the mind), or the simple seat of sensations (the extended body) or even a

union of these types is rejected. "Being-in-the-world," "embodiment," is considered a unity not a union of psychical, biological and psychological events and this unity is how phenomenologists resolve the body/mind problem.

In searching for a way to talk about my wholeness, phenomenology's "being-in-the-world" seems promising. A closer look at its foundations in Husserl's[1] work and its application in Merleau Ponty's[2] seems appropriate. I will try to show how the promise implicit in "being-in-the world", as a way to talk about my wholeness, awaits fulfillment, how the failure to first examine the language used to talk about this wholeness, this unity, prevents that fulfillment.

Roots in Husserl

Like any philosopher, Husserl is intelligible only in contrast to and against the background of the philosophical culture he was attacking. He noticed that scientific philosophy as popularized by German thinkers in the second half of the nineteenth century was misleading and dangerous. It blurred the basic distinction between "doxa" and "epistime". In giving up that tradition of German idealism, philosophy gave up its independence from the sciences. It started regarding itself as either a synthesis of sciences or of psychological analysis. Husserl saw these moves as leading inevitably to generic relativism. Scientific philosophy, for Husserl, was rather

a meaning founding activity which logically precedes the sciences.

Husserl took as his goal the discovery of the absolutely unquestionable foundation of knowledge (Husserl, 1910/1965, p. 194)[3], the ultimate source of knowledge, thereby refuting the arguments of skeptics, relativists, and fending off the corrosion of psychologism (p. 184) and historicism (p. 186), to reach a perfectly hard ground in cognition -- to restore hope through a return to absolute primordial insight in cognition. This search is essentially "a search for certitude" (Kolakowski, 1975, p. 29).[4] It is no more or less than philosophical criticism and grounding carried out to their fullest extent -- to the foundations (Husserl, 1913/1962, 31p. 166).

In one way or another, practically every work Husserl published was conceived of as an introduction to phenomenology.[5.1,5.2] Continually harried by the difficulties of bringing others into this rigorous, critical approach to philosophy, he was also continually dissatisfied by his own efforts to introduce it. His writings reflect an ongoing search for a method that would justify the claims of knowledge to a validity independent of history, persons, society, or biological circumstances; for criteria that would keep the same virtue whether or not the world exists.

Phenomenology, as Husserl proposes it, is generally concerned with consciousness, or mental or psychic life.[6]

This concern for the psychical is a foundational one. More specifically, phenomenology seeks to explicate and analyze those operative and thematic features of mental life without which life would not be what it is. As Zaner states:

> The focus on foundations is on the essentials of consciousness. In this sense, phenomenology may be called a logos of the psyche: it is the rigorous and radical criticism of consciousness in respect of its being that whereby objects are at all encountered and of its being the locus of subjectivity (Zaner, 1970, p. 121).

Within phenomenology, everything gets a meaning emanating from consciousness and perhaps as importantly, I am prevented forever from talking about being that is not related to consciousness.[7]

Between physical things and consciousness, there is for Husserl an essential difference. A physical thing cannot be experienced in any possible process of consciousness as a really immanent component of consciousness (Husserl, 1929/1969, p.256).[8] Consciousness, a stream of ongoing processes, cannot by necessity have any "things" in it; its only "things" are processes of consciousness.

Although emphasizing this difference, Husserl also stresses that the psychical (or consciousness) can exist only as one component of a psycho-physical being,[9] of an animate being, a person. We are always an embodied consciousness. At some point, the connection between the

psychical (or consciousness) and the physical (or embodiment) must be established. While an adequate account of the psychical would be only a part of a more complete theory of being, Husserl believed that it was an essential first-step to develop the theory of the psychical on its own. The principle here is that it makes no sense to study a relationship (embodied consciousness) when the relata (consciousness and embodiment) have not been thoroughly addressed (Zaner, 1970, p. 131). At the time Husserl wrote, a theory of the psychical (or consciousness) was practically non-existent -- at best only partially and irregularly developed and at worst a mass of confusion and dogmatism.[10]

Having said this, there is in Husserl's thought a tension between his desire to avoid psychologism and the naturalistic perspective and his intention to preserve the notion of personal existence. Husserl wanted to avoid a purely naturalistic conception of being which would reduce each of us to the status of any other physical or material object (i.e. a physio-chemical mechanism) and which would negate the concept of persons.

This is not to say that Husserl does not comment on "embodiment"; he does.[11,12] For Husserl, as a human being "embodiment" is always first for perception and first for me (Husserl, 1973, p.507). That is, I uncover a layer of corporeal determinations that pertains to my body, which is for me the organismal center of the perceptual world. In

turn, the objectivity of my body forms the beginning of all relative distinctions (such as near and far), and also the foundation for all other forms of corporeality and objectivity (Husserl, 1973, p.490, 507).

Husserl developed the view of a psycho-physical self as one constituted by the intentional performance of consciousness. (After all, we are aware of the primordial natural being of our own lived body, of the psycho-physical unity of the self, we live it.) He recognized that the body is always a lived body, an animated organism suffused by consciousness. Although there are indications that he was aware of the physical or bodily dimension of the self, he tends to hesitate before a phenomenology of bodily existence and to exclude bodily existence from his understanding of the essential characteristics of persons. Stack (1974) suggests that Husserl followed this course because he thought too strong an emphasis on bodily existence would concede too much to the naturalistic standpoint he so rigorously tried to avoid.

Expression in Merleau Ponty

Of the many followers of Husserl, it is Merleau Ponty who tried to overcome the radical separation between subjectivity and objectivity by confronting the tradition in which dualism prevails -- the Cartesian split of body and mind. Throughout Merleau Ponty's writings, the body remains central. It is through the body that we have

access to the world, it is our primary mode of access, prior to any scientific exploration. It is the vantage point of perception. Barral goes so far as to say "there is no relation and no aspect of Merleau Ponty's phenomenology which does not imply the body" (Barral, 1965, p. 128). It is the nature of the body in Merleau Ponty's writing which will be explored here. In particular, this exploration will attempt to give some credence to Merleau Ponty's theory of the body as a response to traditional views of the body. Merleau Ponty claims that the essence of the body is revealed not in an abstract manner, but rather in a concrete lived situation ... that in fact, he examines the body from a variety of perspectives but it is always the "lived" body. While this exploration will draw freely on all his work, the major focus will be the body as presented in The Phenomenology of Perception.

As a starting point, a brief review of Merleau Ponty's intention as regards the body and how he becomes involved with the body as an issue in the first place, seems appropriate. While one would believe from both the title of his major work, The Phenomenology of Perception, and the preface to it, that his intent is to develop a phenomenology of the body and perception, diverse commentators such as Zaner (1964), de Waehlens (1967), and Rabil (1967) suggest his intent is rather to develop an ontology of "experience-vecue," the fundamental concept of which is "etre-au-monde," and to this effect an analysis of

the body is central. His own comment that "what one might consider to be psychology is in fact an ontology" (Merleau Ponty, 1968, p. 176) lends support to this idea.

Merleau Ponty takes on the issue of the body in the course of a critical exposition of the senses. He rejects both empiricism and intellectualism because "they take the objective world as the object of their analysis, when this comes first neither in time nor in virtue of its meaning and both are incapable of expressing the peculiar way in which perceptual consciousness constitutes its object" (Merleau Ponty, 1945/1962, p. 26). He writes in this context and is much involved in slaying the dragons of empiricism and intellectualism. To clarify, empiricism is seen as an attempt to explain our experience of the world as science explains physical nature; intellectualism is seen as consciousness acting as a universal constituting agent (Rabil, 1967, p. 17-18). For Merleau Ponty, the body is neither a thing nor pure body-less thoughts. He turns instead to the evidence of experience. He grounds his ideas about the body in the more primitive (in a logical and phenomenological sense) level of being in the world.

> Man taken as a concrete being is not a psyche joined to an organism, but the movement to and fro of existence which at one time allows itself to take a corporeal form and at others move towards personal acts. Psychological motives and bodily occasions may overlap because there is not a single impulse in a living body which is entirely fortuitous in relation to psychic intentions, not a single mental act which has not found, at least, its germ or its general outline in physiological tendencies. (Merleau Ponty, 1945/1962, p. 88)

In other words, for Merleau Ponty "the life of the human body cannot be described without it becoming a psycho-physical body" (Merleau Ponty, 1968, p. 168). There is no such thing as experiencing the body disengaged from its relatedness to the phenomenal field of time and space.

> Because of the body, I am open to the world but am also able to close myself to the world. The body is my entry into the world and all the ways the world is accessible to me are connected with the body. (Kwant, 1963, p. 38)

Essentially, we are involved in a consideration of the body in its primordial revelation of itself to a subjectivity, itself steeped in the same ordinary pre-objective existence (Barral, 1965, p. 25). "We are not then looking at what the body is as an idea once it has been reduced to a theme of discourse, we are looking for what it is as a fact for us, before any thematization" (Merleau Ponty, 1945/1962, p. xv.). The body is no longer a machine or peripheral ... it has moved from the edges of things to the center ... it is now the source.

> The body constantly more and more unfolds its own possibilities, and in doing so continually gives meaning in new ways to the world in which it dwells. (Kwant, 1963, p. 57)

In other words, the body is protean ... another perspective will always reveal another face (Merleau Ponty, 1945/1962, p. 226). In one and the same breath it is form giving, an instrument of generalized and latent knowledge; it is my mode of being-in-the-world, my etre-au-monde, it

is my expression of consciousness; it is an object, it is a subject, it is both at once, it is lived, it is fundamental equivocal and ambiguous. As well there is the body as a mass of chemical combinations which constantly interact; the body as the dialectic of the social subject with its group; the body as the dialectic of the living being with its environment (Merleau Ponty, 1963, p. 226-227). There is the body as fixed existence, as acquisition; and as well there is the body as the self-transcending object. There is the body as congealed or generalized existence and the body as a creative taking up of itself (Merleau Ponty, 1942/1963, p. 467). (This list is by no means exhaustive.) The body is for Merleau Ponty a pivot ... the point of contact at which subject and object meet in the intentionality of consciousness. In some small sense, the body has become "the symbol for existence for it transforms ideas into things ... it brings existence into being" (Merleau Ponty, 1945/1962, p. 164). It carries within it all the ambiguity and openness of existence. So while the arguments against empiricism and intellectualism are cogent and well articulated, the body as experienced by Merleau Ponty possesses an essential vagueness.

For Merleau Ponty, the relationship between body and mind is that of a gestalt ... not an either/or but a single reality ... un melange ... at the same time both material and spiritual.

> Notre siecle a efface la ligne de partage du corps et de l'esprit et voit la vie humaine comme spirituelle et corporelle de part en part toujours appuyee au corps, toujour interessee, jusque dans ses modes les plus channels aux rapport des personnes. Pour beaucoup de penseurs a la fin du XIX siecle, le corps c'etait un morceau de matiere un faisceau de mecanismes. Le XXe siecle a restaure et approfondi la notion de la chair, c'est-a-dire du corps anime (Merleau Ponty, 1960, p. 287).

So Merleau Ponty claims and would, of course, like the reader to believe. For the careful reader, it may be evident that Merleau Ponty thinks he sees something for which he cannot find any suitable terms. The body remains elusive and complex and more than once the reader simply has to make do with negative expressions to indicate a positive reality.

Critique

There is a striking similarity in how Husserl and Merleau Ponty view the body, my body. This similarity, as well as establishing a common ground, provides a base for further exploration, when explicitly stated.

As stated earlier Husserl and Merleau Ponty are at war with predominant trends in traditional philosophy. Particularly, they are battling the dualism of body and mind. This battle - implicitly in Husserl and explicitly in Merleau Ponty - involves a rejection of empiricism and of the message theory of sense-perception.

The body, my body is seen as fundamentally active, not passive or receptive.

> Only by means of the experiential relation to the animate organism does consciousness become really human and animal and only thereby does it achieve a place in the space and time of nature (Husserl, 1913/1962, p. 103)

The body, my body becomes a phenomenon- precisely and only as it presents itself to the one whose body it is. To witness that phenomenon, the phenomenologist focuses on the functioning whole. In other words, we have as our phenomenon a continually ongoing act, not something "once done, done forever." This body-as-experienced, this body as lived, or this "embodiment" (Zaner, 1964, p. 249) represents the promise of phenomenology[13] - the promise of healing the body-mind split.

Unfortunately, "embodiment" is not so much a rejection of the dualism of the body and mind as a critical re-evaluation. This re-evaluation addresses the peculiar circumstance that, though my mind is not like my body, nor my body like my mind, nevertheless I am not in my body like a boatman is in his boat.

> It is my animate organism, and accordingly I am singled out for myself before all other objects of experience ... My organism is the only one in which I experience in an absolutely immediate manner, the embodiment of psychic life. This occurs in such a way that I at once perceive not only the thing, animate organism, and its corporeal conduct but also at the same time my psychic life; and finally, both of these at once: the self-

> embodying of the latter (the psychic life) in the former (my organism) and the self-expressing of the one in the other. (Husserl, 1923/1959, p 60-61)

For both Husserl and Merleau Ponty, "embodiment" is the concrete experience by consciousness of its animate organism. The animate organism, in so far as it is experienced concretely by consciousness, is the continuously ongoing embodying of the flux of mental life (Zaner, 1964, p. 249). The psycho physical self is thought to be constituted by the intentional performances of consciousness, to be an objective phenomenon for consciousness.

While "embodiment" (especially as present in Merleau Ponty) seems promising, the focus on consciousness seems inconsistent with efforts to heal "the body/mind dualism", to understand the body, my body as a living whole.

Admittedly, for both Merleau Ponty and Husserl, from the lowest levels of inner time consciousness, consciousness is embodied: first of all by its kinesthetic flow patterns, then, by the synthesis of identification, differentiation, associative sense transfer and unification. All these constitute the various sensory fields as self-identical and different from one another and then constitute the self as one single organizational point, and so on ... My body embodies and thereby "expresses" my consciousness. Hence all my bodily movements are experienced by me as at once corporeal and subjectively

lived. Though not their intent, my body is my means of being in the world, it belongs to me.[14] For both these writers, the body, my body remains my physicality, something to be aware of. The body, my body remains a context for being, a backdrop ... an object for study at best.

If this were not problematic enough, the phenomenological method, in itself, raises further concerns. As stated earlier, in developing this method, Husserl is looking for pure consciousness, an independent realm experientially given. He is searching for a truth which is gained independently of philosophical prejudices and artificial abstractions. He is looking for a way, a means, a method that would justify the claims of knowledge to a validity independent of history, persons, society or biological circumstances. He is looking for a criterion that keeps the same virtue whether or not the world exists.

In order to do this, he purifies the field of consciousness of any existence as a first and necessary step. Both Husserl and Merleau Ponty do this through a kind of disengagement from the texture and style of the concerns of the moment. The disengagement is a kind of reflective grasping, both of things in the environs and of the typical ways of dealing with them. It reflects a critical shift and with this shift there emerges the recognition of what before seemed so obvious and commonplace that it called no attention to itself. All

alleged evidence, all realities of daily life - external bodies, my own body, my self (as part of the world), constructions, physical, social and mathematical sciences, all these are cancelled for the time being. Within such a purified field, I know neither the world nor consciousness as belonging to it, I know only phenomena as intentional correlates of my conscious acts. This disengagement or reduction represents a change in attitude, not a change in the world. Its function is both negative (it clears cogitations from prejudices) and positive (it gives access to pure consciousness).

The skill required does not then consist in remembering ready made truths. The skill consists of constant effort to purify one's own consciousness of naive stereotypes and beliefs of daily life, of the apparent evidence of science, of the habitual and misleading concepts, or of the blurring of the distinctions between the facts of experience and its content.

This process is similar to the process an archaeologist goes through when excavating a prehistoric site. For the structure of consciousness and experience have undergone a process of sedimentation, and like the archaeologist, the phenomenologist must carefully describe the various strata in order to reveal the meaning-giving structures that are taken for granted in everyday life. It is an active search, not a passive waiting, that makes possible the revelation of these structures. The

commitment must be to examine all phenomena carefully and to take none of them as familiar or understood until each has been carefully explicated and described. (However, it is always possible that at any given time an individual phenomenologist may be operating with certain unexamined assumptions.) The task is not to describe a singular phenomenon but to uncover in it the universally valid and scientifically fruitful essence. This insight is not a procedure of abstraction but a special kind of direct experience of universals, which reveal themselves to us with irresistible self-evidence. Such is the phenomenological challenge issued by Husserl and Merleau Ponty.

For some commentators, the phenomenological method in general (the reduction, more particularly) seems improbable, rarely shown in actu, something to be achieved only through approximate steps. Philosophically, a method is never clear until it is demonstrated in operation. Even looking through Husserl's own writings, few examples can be found where his method has been successfully applied.

One cannot question the historical context of his search - his need, or the need he perceived, to come to terms with consciousness. Nor can one ignore that there may be knowledge to be gained by looking at consciousness. Yet having looked at consciousness, having focused on a "part", one is left asking how is it possible to separate consciousness from the body, my body? And if this

separation is possible as Husserl believes, how does he propose to examine the relationship between a thing, the body, my body and a non thing, my consciousness? How can there even be a discussion of relationship unless we believe these do exist separately?

Further, how could we reflect upon the body, my body "without presuppositions"? How is it possible to reflect on the body, my body in such a way that the result of that reflection would be valid, regardless of whether or not we breathed, moved or experienced our bodies first hand? We can try to "directly" grasp something universal about our bodies, only on the condition that we grasp - even in a vague form - the meaning of the phenomenon as it is conveyed in language, meaning, as we take it from collective experience. To analyze the body, my body, we have always to deal with the sedimentation of secular experiences and those experiences, though historically explainable, do not carry any logical necessity. Kolakowski (1975) claims that "there are unremovable residuals of common sense in any experience" (p.56). We can not get rid of language, meaning, we can not get rid of the whole cultural history of mankind. It seems hardly possible that we can go back to the intellectual innocence that Husserl demands. Even if we accept that the reduction is possible, that we can use this method to experience universals directly, to uncover the essence of the body, my body, we must now use language, a symbolic, social

convention overturned in the reduction, to try to convey, to share our insight. Obviously, looking at language usage as suggested by Israel (1981) might allow greater success in accurately describing that insight. Admittedly, no matter what we do, the description cannot replace the experience. Still the closer, more accurate the description, the easier it will be for another person to achieve a similar insight. Without somehow becoming sensitive to language usage, the chances of developing such a description seem doubtful. I am really unsure how I might go about successfully using a social convention, in this case language, without falling into the habits of thought embedded in that same social convention if I don't undertake such sensitization first. Even more doubtful, is the successful negotiation of both the reduction and the description. It is ironic that I must first overcome the influence of language in my search, only then to use it to try to convey what I have found.

Husserl and Merleau Ponty offer us personal awareness, a renewed sense of the person. They help us view ourselves as individuals living, breathing and acting but they overlook that we are always in context, always in relation. They tend to forget that we live, breathe and act in a social context and that this context not only influences our thoughts and our actions, but also actively helps shape our consciousness, what we are aware of in ourselves as well as in the world around us. This focus on

"consciousness" and the seeming lack of concern with the role of context in helping to shape that "consciousness" reflect an inherent dualism in both Husserl and Merleau Ponty. It is this dualism that undercuts the promise implicit in "embodiment".

One may wish to view the phenomenological focus on consciousness as inclusive of the body, my body, but it is primarily a focus on my awareness; my awareness being what calls itself to my attention. To say this another way, in phenomenology consciousness and the body become a kind of figure/ground constellation in which consciousness is the figure. Since I seem able only to focus on one thing at a time, this focusing of attention, vesting of significance in consciousness, echoes the body/mind problem. In singling out the figure, a part, (consciousness), we cannot help but lose the whole, our sense of the overall gestalt.

This line of reasoning is further strengthened if we look at how Husserl and Merleau Ponty attempt to include the body. In particular, how they refer to the body, my body and as importantly how they speak of the whole. While one might be exhaustive in one's examples, I will provide only one example from each of these writers.

Throughout his work, Husserl speaks of separating consciousness from the body, my body. In his Preface to the English Edition of Ideas, he speaks of setting aside "all psychophysical questions which relate to man as a corporeal being" to obtain "an original pure descriptive

knowledge of psychical life as it is in itself" (p. 44). He speaks as if physical and psychical life were two discrete things. One wonders how this is possible since "bewusstsein" or consciousness takes up no space and hence is not really a thing at all. He seems to suggest that our corporeality is something we can lift from ourselves, like a veil that obscures who we truly are. One wonders what kind of tool is needed to do this, what kind of tool could possibly work. Perhaps language plays a part here, perhaps the existence of two discrete words makes us gloss over that we are dealing with a thing and non thing and to treat them as if they were of equal or similar value. Husserl's larger concern with consciousness allows him the choice of ignoring the body, my body. Still it seems a strange act of language that allows me, the subject, to treat a non thing (i.e. consciousness) as if it were the agent in my life. Even Husserl's use of "Leib", animated or lived body suggests that consciousness is the key and leaves the reader with echoes of a ghost in the machine.

As indicated earlier (confer with page 28 of this document), Merleau Ponty speaks of the body not as something given only once but as many things, as wearing many faces. Unfortunately, with the exception of Schneider [15.1,15.2,15.3] he does not indicate whose body he is talking about. This approach leaves the reader with several problems.

The first is perhaps the more obvious. If the body is many things, is many faceted, what holds all of these things together? What or where is the thread of continuity? Stack (1974) suggests that the thread of continuity lies in my individuation, my specificity and to miss this is to miss an essential truth about the body, my body. If this is true, how can I ever talk correctly about the body in general without taking up parts and missing the whole?

Secondly, and perhaps a little less obvious, by not indicating whose body he is referring to at any given time, Merleau Ponty has essentially made the body, my body an abstraction. In order to do this, in order to accept this, common shared experience is/must be assumed. This not only causes the comments to appear to have more weight than they actually do but common shared experience may or may not be correctly assumed. The basis for the abstraction, for his comments - both the source of his data and observations, as well as the data and the observations themselves - remain obscure and inaccessible. Without being able to access any of this, how can the reader contextualize his comments and/or critique them. Without knowing whose body he is talking about, how can we recognize or establish the validity of his claims except through resonance?

Again as with Husserl, language has prevented Merleau Ponty from doing what he set out to do - to talk about the body, my body not as a theme of discourse but as a lived experience.[16]

CHAPTER IV

General Systems Theory and My Body

Finding Meaning in Pattern

General systems theory looks at the world in terms of the interrelatedness and interdependence of all phenomena -- physical, biological, psychological, social and cultural. In this approach, an integrated whole whose properties cannot be reduced to those of its parts is called a system. Instead of concentrating on basic building blocks or basic substances, the systems approach emphasizes basic principles of organization. Systems thinking is process thinking, form becomes associated with process, interrelation is interaction and opposites are unified through oscillation. Relation then is the stuff of system (Beer, 1975). As in phenomenology, general systems theory resolves the body/mind question by focusing on the functioning whole -- as a living system.

From this perspective, living systems (ourselves included) are viewed as organized in such a way that they form multi-leveled structures, each level consisting of subsystems which are wholes in regard to their parts, and parts with respect to the larger wholes. Thus molecules combine to form organelles, which in turn combine to form cells. The cells form tissues and organs, which themselves form larger systems, such as the digestive tract or the nervous system. These, finally, combine to form a living being. All these entities -- from molecules to human beings

and on to social systems -- can be regarded as wholes in the sense of being integrated structures, and also as parts of larger wholes at higher levels of complexity.

All living systems possess an internal plasticity and flexibility, their functioning is controlled by dynamic relations and is marked by the principle of self organization. This means that its order in structure and function is not imposed by the environment but is established by the system itself. Viewed from this perspective, body and mind are manifestations of a set of systemic properties, a set of processes that represent the dynamics of self organization.

The activity of systems involves a process known as transactions -- the simultaneous and mutually interdependent interaction between multiple components. Systematic properties are destroyed when a system is dissected, either physically or theoretically, into isolated elements. Although individual parts, in any system, are discernible, the nature of the whole is always different from the mere sum of its parts.[1.1, 1.2, 1.3, 1.4]

Allow me an example. Looking beyond the individual teacher - pupil interaction to the dynamics of the classroom, we begin to see, that contrary to our naive assumptions, the poor student is not marked by a lack of effort.

In a study of reading competency, McDermott (1977) documents the enormous efforts of the poor reader just to get and hold the teachers' attention long enough to read. If McDermott had only looked at what went on between individual poor readers and the teacher, he would have missed the role played by the better readers. He would have missed their interruptions, requests for help and bids for attention - that made it virtually impossible for the poor readers to read and for the teacher to attend. In this example, it is easy to isolate individuals, it is looking systematically at the interaction of poor readers, classmates and teachers that helps us understand what is happening.

Systems which are both wholes and parts or "holons" have two opposite tendencies: an integrative tendency to function as part of the larger whole, and a self-assertive tendency to preserve individual autonomy. These two tendencies are opposite but complementary. In a healthy system, there is a balance between integration and self assertion, a dynamic interplay between the two, which makes the whole system flexible and open to change (Copra, 1982, p.323-4).

Again in searching for a way to speak about my wholeness, systems theory with its focus on the whole would seem to hold promise. A closer look at the work of Werner and at how the whole finds expression in Vygotsky seems appropriate. I will try to show how that promise awaits

fulfillment, how the failure to look at the language used to talk about this wholeness, this unity, remains an obstacle to that fulfillment.

Roots in Werner

Werner takes up the problem of organic wholeness as the center of his inquiry. His intent is to represent wholeness and to do so by defining the general rules and principles that underlie development. As Werner himself says, one of the basic aims of developmental psychology is to establish ... "the direction of development, and the formulation of any general tendency revealed in developmental relationship and direction" (1926/1948, p.5). To do this, he draws heavily on the principles of anthropology, aesthetics and embryology.

According to Glick (1983), the critical feature of Werner's work is its standpoint for analysis. Werner does not hold at arm's length what he is claiming, but rather he attempts to represent in one dramatic moment the innerness and shaping characteristics of psychological organization. The separate categories of function, e.g. cognition, perception, affect, are seen by Werner as having achieved separability in the course of ontogenetic development. They do not exist in earlier form as things already separate. Thus the standard tactic of looking for earlier manifestations of the separated function is denied. Inevitably, along with the problem of differentiation or how

this separation takes place comes the problem of accounting for the preserved connection between the separated functions and their organismic base -- the linkage between the whole and its parts.

Further Werner is deeply committed to studying psychological processes as they occur within the whole acting, feeling, striving organism. Influenced by Gestalt psychology, most specifically by the Leipzig school of Krueger, Sander and others, (Ganzheitspsychologie),[4] Werner believes that the whole cannot be understood by analyzing it into separate elements.[5] For him, development refers to more than the passage of time, to more than increases in size; it involves changes in structure. These changes in structure may be defined according to the orthogenetic principle:

> Whenever development occurs, it proceeds from a state of relative lack of differentiation to a state of increasing differentiation and hierarchic integration. (Werner and Kaplan, 1956, p. 866)

Or to quote Werner himself,

> Wherever development occurs it proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation and hierarchic integration (Werner, 1957, p. 126)

Werner further proposes that development can be characterized by a general underlying trend of increased differentiation between the subject and the object as well as a decreased domination of the subject's cognitive

abilities by basic concrete situations and experiences (a tendency to move away from a dependency on sensorimotor information).

Werner wrote extensively on the many applications of the orthogenetic principle (1926, 1934, 1956 to name only a few). However, he was particularly interested in the process of self-object differentiation, a gradual process by which children separate themselves from their environment. He sees this process progressing through three levels.

Initially, at the sensorimotor-affective level, infants hardly experience an outside world apart from their own immediate actions, sensations and feelings. Gradually children come to function on a more purely perceptual level, perceiving things "out there" apart from themselves.

To gain the most impersonal, objective view of the world, we must rise to a conceptual level of thought. With development then, we gradually form perceptual and conceptual ways of knowing the outer world apart from our immediate needs, feelings and actions.[6] And as these specifically mental operations emerge, they give way to behavior governed by mental plans. This does not mean, however, that once we have developed these intellectual operations, we must rely on them alone (Werner, 1926/1941, p.4, 39, 50 to give only a few instances).[7] Werner believed that as adults, we preserve the richness and vitality that characterize earlier levels. He tried to demonstrate through the concept of hierarchic integration that abstract

thinking does not work in a vacuum but organizes and integrates sensations, actions and feelings. The intellect imposes order upon "the confusing multiplicity of sensuous impressions" (Werner, 1926/1948, p.52).

If there were a single topic on which Werner (1956) wrote with the deepest feeling, it was physiognomic perception. We perceive stimuli physiognomically when we react to their dynamic, emotional, expressive qualities. Such a perception is based on a syncretic unity between oneself and objects. When we have true intersensory experiences, Werner stated, we do not experience colors or sounds objectively, as "out there", but feel them within our bodies. Colors or sounds invade us or envelope us and fill us up. Werner believes that the various senses influence one another through general bodily feelings because they develop out of a common level ... that is the level of the bodily, motoric and affective (1934/1978, p.164).

A Vygotskian Reflection

> The primary and fundamental task of that time [the late 1920's and 1930's when the 'battle for consciousness' raged] consisted of freeing oneself on the one hand from vulgar behaviorism and, on the other hand, from the subjective understanding of mental phenomena as exclusively internal subjective states that can only be investigated through introspection (Luria and Leontev, 1956, p.6)[8]

This battle is the one which engages Vygotsky. He seems to view consciousness in part as mind reflecting on itself, (Vygotsky, 1934/1962, p.115), as a means to turn around on one's thoughts, to see them in a new light.

For Vygotsky, thought is a mode of organizing perception and action. As he puts it in an early essay,

> Children solve practical tasks with the help of their speech, as well as with their eyes and hands. This unity of perception, speech and action, which ultimately produces internationalization of the visual field, constitutes the central subject matter for any analysis of the origin of uniquely human forms of behavior (1978, p. 26)

Or to paraphrase Francis Bacon: neither the hand nor the mind alone, left to themselves, would amount to much. Language and action are at first fused. That is why the child talks to herself while carrying out a task. Eventually, language and action become separated and the latter (the task) can be represented in the medium of the former (words).[9]

Consciousness and control appear only as a late stage in the development of a function, after it has been used and practiced unconsciously and spontaneously (Vygotsky, 1934/1962, p.90). In order to subject a function to intellectual control, we must first possess it (1934,1962 p.90). This suggests that prior to the development of self directed, conscious control, action is, so to speak, governed by a more direct mode of responding to environmental events.

In the differentiation process described earlier, language is first mastered with an adult or more competent peer solely with the objective of communicating. (This social transaction is, for Vygotsky, the fundamental vehicle of education, learning is never a solo performance.) The mechanism of individual developmental change for Vygotsky is rooted in society and culture (1978, p. 7). Once mastered sufficiently in this way, language can be internalized and serve under conscious control as a means of carrying out inner speech dialogues. Vygotsky sees a deep parallel between this instance and all forms of knowledge acquisition- precisely - a match between a support system in the social environment and the acquisition process in the learner.

Vygotsky's attention to the importance of process oriented approaches shares deep similarities with Werner's approach. For him, the objective of learning is to place the child in a situation beyond his or her current capabilities and to document the manner in which the child assembles him or herself to meet the demands of the task. The experimenter then alters the testing procedure so as to tap into the child's skill level (or what some have called the child's cultural knowledge) to more fairly reveal what there is to be revealed. This shift of the unit of analysis to the inter-personal level, to the problem of negotiated sharing of the culture of the experiment, and the theoretical items to enter into the equation such as "world

knowledge", "cultural knowledge", "inter-personal exchange", "skills" and possibly "structures" allows for a method more dynamic, more sensitive to ethnographic surround, more process and context oriented.

Again like Werner, Vygotsky sees the individual as developing from an initially undifferentiated state (egocentric speech)[10] to one where there is increasing distance between thought (inner speech) and communication (external expression). While environmental input initially provides meditational systems, the organism operates upon these by progressively matching and mis-matching to those systems. It follows that there must be some input to the developmental equation that allows for the private constructions of the organism to stand in an essentially dialectical relationship to the socialization pressures on thought and action. Vygotsky repeatedly asserts that the unique "private" characteristics of thought progressively develop their uniqueness in the course of development (1934/1962).

Vygotsky rarely speaks of the body or of its place in language development. Often, his view can only be inferred. He seems to view the body in a primordial sense -- as a more primitive and initial way of dealing with the world. "In the beginning was the deed. The word was not the beginning -- action was there first; the word is the end of development, crowning the deed." (p.153)

One is left wondering whether Vygotsky recognizes that while acts and words may be viewed as tools, or as means to, deal with the world (Bruner, 1985), we realize * them. They co-exist in us and find expression only as we live them. In the last analysis, they can be considered only aspects of what it is to be alive and human.

Critique

The promise held out by both Werner and Vygotsky lies in their understanding/conceptualization of the whole. For them, the whole or "totality is not a superordinated unity built up of elements and something more than their sum." (Werner, 1926/1948, p.8). It has an entirely different origin; it is prior to any divisions into elements whatsoever. If it is impossible to derive the totality from a synthesis of elements, it follows that the only course left is to seek an explanation in the totality, itself. The elements are not precedent to the whole but the whole, as a basic entity, is the precursor of its component parts.

Both Werner and Vygotsky realize this promise most effectively when speaking of the role of the social world/culture in development. As Werner says,

> Psychology, including ethnic psychology, must proceed from larger living unities and arrive by analysis at unities of a lower order ... language, religion, the law, customs can never be rooted in the isolated individual. Exactly the reverse is

* to realize - to make real, to bring into being.

> true. The individual thinks, speaks a certain language, and acts in a characteristic way because of his participation, his integration, in the whole; and his thinking, talking and acting are primarily understandable only in so far as he is identified with this totality (Werner, 1926/1948, p. 9).

The work of both of these psychologists reminds us that we always grow and develop in a social context that impacts on that growth and development. In doing so, they provide us with a useful tool in understanding ourselves as living wholes, as agents within a cultural context.[11]

The application of their understanding of the nature of the whole to the body/mind question is much less satisfying. While proclaiming the importance of looking at the acting, moving, living child, there is a decidedly mentalist bent in both, that is to say, both focus largely on the cognitive aspects of the child. Werner's focus on cognition is an explicit one. The title of his major work is Comparative Psychology of Mental Development. It is interesting that while Werner is convinced of the importance of organic coherency and of the organic linkage between levels of development, he chooses to focus exclusively on mental development (Werner, 1926/1948, p.3, 23).

Vygotsky is a little more implicit in his emphasis on the mental. The focus of his book, Thought and Language, is the dialectical relationships that exist between individuals and society - on the relationship between internal organization and external form in the creation and realization of meanings. Unfortunately, when he gets down

to cases, he is really after that array of abilities we now call cognitive. Accordingly, the hints he gives about the nature of internal organization (e.g. his representation of individuality) are a bit murky. On one hand he seems to talk of expressive, affect-laden ineffabilities and on the other he uses prediction as the model of innerness. The prediction model suggests that our innerness is made up of predicates without their surrounding sentences. This view is compatible with a notion that inner experience is a transaction of, but not a different sort of thing than, outer experience and expression. If inner speech is prediction, then it is perhaps not a fully adequate model of the internal organismic state of affairs. There is more to any child than his or her cognitions.

What causes both Werner and Vygotsky to fall into mentalism is their belief in the hierarchical thrust of development. Vygotsky sees development as proceeding according to the laws of biological evolution as formulated by Darwin. All elementary psychological processes such as non-verbal thinking, eidetic memory develop during this evolution. They form the foundation of human behavior. Shared by humans and animals alike, these processes are not what makes the human being. (Vygotsky, 1977, 1982a, 1982b). For Vygotsky, the genuinely human processes cannot be experienced by this biological evolution. They are cultural in origin. One might say that because people create their own environment, which in turn determines their development,

they are, with regard to historical development, their own creators.

In child development, natural and cultural developments coincide and interact in complex ways. On one hand, biological processes develop during ontogenesis through maturation. On the other hand, higher psychological processes develop in the child through his or her association with adults working in accordance with culture. By higher processes, Vygotsky understands, for instance, logical memory, creative imagination, verbal thinking and regulations of action by will (1934.1962, p.90). He includes as lower processes direct perception, involuntary memory and preverbal thinking. The main distinction between lower and higher psychological processes is that the latter are mediated by signs and are social in origin (p.56).

This sharp separation of lower and higher psychological process has come in for criticism. Brushlinsky (1967/1976) has suggested that Vygotsky has constructed a dualism. The lower processes are viewed as quite passive and biological in nature. The verbal character of the higher psychological processes is stressed. Vygotsky, the untiring opponent of methodological dualism, remains an ontological dualist.

For Werner, the separation is less incisive. As Werner (1926/1948) says, "never is abstract thinking so self sufficient that it can dispense with the material of sense" (p. 52). Yet he too believes in increasing hierarchic integration in the sphere of mental events and functions.

The activities at the motor, sensory or emotional level are subjected to the dominance of the higher function of mentality. All this is to say that adults preserve the richness and vitality that characterizes earlier levels. Abstract thinking does not work in a vacuum; rather it organizes and integrates sensations, actions and feelings. The intellect imposes order upon "the confusing multiplicity of sensuous impressions by means of judgements and interpretations" (Werner, 1926/1965, p. 52).

Instead of the fusion of thought and action one might expect as a result of the discussion of wholism as presented by both Werner and Vygotsky, we are presented with a continuum with body and mind forming the polarities of that continuum. Maturation brings with it an increased domination of the totality by the mind. For both Werner and Vygotsky, human development is largely unidirectional from the concrete to the abstract. (One might say a la Ryle that such a belief reflects a deep seated cultural belief in dualism, in the polarity of body and mind.) One is left wondering how the physical gets left behind, remains primitive, if it is an integral part of an evolving unity. It seems more reasonable to assume that if development or qualitative change occurs, it affects the whole. To echo Werner, whole is not the parts themselves, or the sum of those parts, but something other. Development then is <u>not</u> a change in the relationship between the pieces, <u>not</u> a shifting of emphasis.

Much may be made of Werner's belief that the concrete is never really left behind but Werner does not explore or even suggest how this might be possible. If as he suggests there is qualitative organizational change as one develops from one level to the next, how is it possible that this process of differentiation is reversible? How do we access earlier states once qualitative change has occurred?

Varela (1976) offers a most insightful critique of this belief in hierarchical integration when he suggests that the key to understanding the whole-ness of systems (and of ourselves by extension) is to understand that they (we) are organized, their (our) parts are organized, in a circular form. That is, every part interacts with every other part. The result is a total self-referential system.

The Russell-Whitehead theory of types requires the breaking up of any circularity by establishing a hierarchical form. This theory is the predominant convention in classical science and therefore in systems theory. There is the beginning and the end, and no confusing the two. The application of the Russell-Whitehead theory of types is evident in both Werner's and Vygotsky's view of development. Varela (1976) suggests, "If you are to really look at wholes, you can't do that. You have to look at the beginning and the end as a circle. You cannot deal with them hierarchically. You have to look at them as self-referential situations" (p.27). The closure, the self-referentialness, seems to be the hinge upon which the

emergent properties of a system turn. For example, if I try to understand how my brain interacts with my liver, I know right away that it is not that my brain acts on my liver in hierarchical form but that my liver also acts on my brain in a simultaneous fashion. Unless the mutualness, the closure, of a system is confronted, the system is lost. It is the simultanity of interactions that give the whole system the flavor of being what they are.

Varela (1976) goes on to say no system is closed for interactions, that is, it is not closed for matter and energy, but it is closed for computation or information, in other words it has organizational closure. And if we take seriously that the system is organizationally closed for information, then one can see that its structure has to be made up of self referential interactions. The system is made up of circular interactions, where there is no linearity, where, as in the feedback loop, there is no meaning in establishing cause and effect, because cause and effect are mixed together.

> What you do with the closure of a system is actually what we do all the time i.e. we interact with a system by poking at it, throwing things at it, and shouting at it and doing things like that, in various degrees of sophistication. (P.28)

Varela asks us to look again at Werner and Vygotsky. He asks us to remember the promise inherent in the totality as something other than a synthesis of elements. He states that self-reference[13] is the key to that something other.

He further suggests that this self-reference is the result of organizing principles that allow the whole/totality to survive changes in structure and function.

It is tempting to view the conceptual problem cited by Varela as singular evidence of dualism. Yet even a superficial examination of Werner and Vygotsky suggests deeper roots. A brief look at how Vygotsky and Werner speak about this whole and the place of the body, my body in that whole is in order.

For Werner (1926/1948), "a living organism is a psychophysical unity" (p.41) This is his attempt to catch the continuity of life prior to any splitting. Unfortunately, such a statement leaves unanswered who does the unifying, what is unified, how this unity is obtained or effected and why the unity is characterized as a psychophysical one. It is a trick of language to join psycho and physical and imply a synthesis. At best, the statement implies a parallelism, a co-existence of body and mind.

Vygotsky views the body, my body as a primitive but indispensable way of being in the world (1934/1962, p. 6). He claims to want to speak about thought as enmeshed in the fullness of life, in the personal needs, interests, inclination and impulses of the thinker (p.8,30). Instead, he speaks of egocentric speech as

> extending its role for besides its role of accompaniment to activity and its expressive and release functions, [it] readily assumes a planning function, i.e., turns into thought proper quite naturally and easily (p. 45).

Vygotsky speaks as if speech and/or thought had life. Speaking this way allows both Vygotsky and the reader to forget to look at the living child. We forget to look in vivo and think that we can deconceptualize our discussion without loss, without loosing ourselves - the concrete, the particular, the lived.

According to Vygotsky, thought and language not only have life but also distinquishing characteristics. All thought is not verbal thought.

> Verbal thought, however, does not by any means include all forms of thought or all forms of speech. There is a vast area of thought that has no direct relation to speech ... ...Non-verbal thought and non-intellectual speech do not participate in ... [the fusion of thought and speech] ... and are affected only indirectly by the process of verbal thought (p. 47, 48).

Are we then dealing with two different kinds of thought? It would seem so. One is left asking what is the whole or context for this differentiation process ... where is the whole child? Again as with Werner, Vygotsky's use of language frustrates his intent to focus on the whole.

CHAPTER V

My Body as a Living Whole

Pursuing An Ephiphany

At this point I want to return to the framework proposed in Chapter I as a way to rework and to gather together the insights gained throughout this exploration. I want to revisit the body, my body (first metalevel), move on to the role of language, in this case the wholistic metaphor, (second metalevel) and then suggest ways to better realize* my body as a living whole (third metalevel).

The Starting Point Again: The Body, My Body

I initiated all this on a very personal note. I tried to describe, to share the centeredness, the wholeness I feel when I dance. I wanted to find ways to acknowledge and explore that experience.

So I began my work with a few simple statements of recognition. To rephrase those statements:

> ... The body, my body breathes, runs and digests but it is the body, my body that also loves, dreams and writes history. There is, in fact, nothing I can do or be that is not the body, my body. This is true whether I walk or dance, express my thoughts or feelings through an art

* to realize - to make real; bring into being

> form, understand what another human being is doing or saying, know the meaning of any object, sense shape, texture or dimension or appreciate the expression of another person ...
>
> ... The body, my body is not merely my physicality, not merely my anatomy or physiology. I use and have used the body, my body to indicate the living whole that is my total being - perhaps less poetically, my integrity, my self referentialness.

I found it is very difficult to go beyond these kinds of statements. On one hand, I knew that to search for an objective description of the body, my body, would be to somehow assume that there was an objective world, that is a subject-less world. On the other hand, while recognizing that I was the observer, the describer, I remained convinced that I was trying to acknowledge and share something more than an idiosyncratic experience, that I was trying to convey something larger, something of the collective human experience. This tension is not easily resolved; my approach has been to use style self-consciously to make some space to explore it. Focusing on the wholistic metaphor has allowed me to recognize the place of perspective and of language in shaping my understanding, your understanding of the body, my body, your body.

The Approach: The Wholistic Metaphor as a Tool

I began my work as a search for a way to talk about the body, my body as a living whole. The wholistic metaphor offered one way to do just that. Certainly, exploring this metaphor has allowed me to take up possibilities, opened me to systematic, yet different thoughts.

My overall approach has been to foster a kind of critical thinking that encourages me to look at how language has been used to speak about ourselves as living wholes. I have chosen to do this through metaphor, which I believe is central to the way we organize and understand the body, my body, your body, and by extension, our world. But one does not have to accept this thesis. The more important general point is that our ways of seeing the body, my body, are always bounded ones, and that much can be learned by appreciating both the partial nature of our understanding and the need to use language carefully if we are to capture even that partial understanding. Stated in more conventional terms, there is a difference between the full and rich reality of the body, my body, and the knowledge we are able to gain or express. We can know our bodies only through our experience of them. We can use metaphors and theories to grasp and express this knowledge, and experience, and to share our understandings, but we must always remember that they need to be used self-

consciously lest we come to believe the metaphor is the reality.

Regardless of which metaphor we use, we can never be sure we are absolutely right. To choose a metaphor is to choose to view ourselves in a particular way, to look through a particular lens.

> It is as if a stranger peered into a small house containing irregularly placed tiny windows, each with a different refractory index, and covered on the inside by special filters so that objects of different hue appeared to have the same color and objects of the same hue appeared to have different ones. The view from each window offered a slightly different picture of the complicated scene on the inside. If the stranger is to know the complete contents of the house, he must learn about the refractory characteristics of the glass, the nature of the filters and construct ingenious hypotheses about the relations among the different perspectives; for he only has visual access to a small proportion of all that is locked within (Kagan, 1971, pg. 171-172).

Allow me an example at this point. Thinking and understanding ourselves as machines, as a series of parts able to be taken apart and put back together has its uses. (But perhaps in thinking this way we have become more machine like.) Machines break down, are disposable and have more important parts than others. It is true, we break down, we get sick and we do die. Depending on our focus, some parts of ourselves are more important than others. The mechanistic analogy does allow us to segment, to separate our actions from their consequences, ourselves from the environment, ourselves from each other and perhaps most importantly, ourselves from ourselves. It focuses on

parts. Such a focus can not help us unlock Werner's "more than". To think it will is to fail to see that these represent two levels of discourse, not one.

Again it is a question of choice and of focus. Every analogy or metaphor helps us understand some things while causing us to miss others. As R. D. Laing (1967) puts it so eloquently in Politics of Experience ...

> ... What we think is less than what we know. What we know is less than what we love. What we love is so much less than what there is. And to that precise extent we are so much less than what we are. (p.26)

If any perspective, analogy, metaphor has inherent limitations - acts like a pair of blinders in some peculiar fashion - then let's choose one that speaks to connection, to actions that have consequences, to sharing, to seeing the figure/ground of being as the gestalt it is, to understanding that the parts only make sense when contextualized, when viewed as having integrity. The wholistic metaphor encourages us to believe that we share in the unity and harmony characteristic of organisms. On some levels, this belief is not such a difficult one to accept. In the body, my body, the blood, heart, lungs, arms and legs normally work together to preserve the homeostatic functioning of the whole. The body, my body is a unified system sharing a common life and a common future. Circumstances in which one element works in a way that sabotages the whole, as when

appendicitis or a heart attack threatens one's life, are exceptional and pathological.

The wholistic metaphor is both an invitation and a challenge. It works subtly and powerfully to change our general thinking (Morgan, 1986). It invites us to see ourselves in our integrity. It asks us to focus on ourselves as living wholes. It asks that each of us know ourselves as a unity - as not divided against ourselves, as "not merely a mind and a heart" (Cummings, 1965, p.175). It invites us to acknowledge the harmony intrinsic in our being. It challenges us to come to terms with our living nature, to become centered in ourselves.

Romantically, it hints that being centered in ourselves, in focusing and trying to understand and accept our nature, we might then move out of ourselves carrying that sense of harmony, inner peace and trust into the world. Maybe in a world such as ours, marked by trouble and strife, this is a possibility, however slight, not to be lost. Certainly, it cannot hurt to free the metaphor to work its magic. It cannot hurt to try and use the metaphor well.

In trying to use the metaphor well, we are beginning to take responsibility for the tools we use in understanding ourselves. We can only do this if we find ways to accurately construct the lens we look through, learn how to use it appropriately, understand what it helps

us see and what it obscures. This task is then a methodological one.

Metaphors are not just interpretive constructs or ways of seeing, they are also frameworks for action. That is what I have been trying to formulate - what we must do to realize the potential in the wholistic metaphor, what we must do to use it well. As we have seen, past attempts give us some messages about what has worked and where to try next in our efforts.

The Application: Suggestions for a New Methodology

In my work, I have been "striving to find ways to put the severed parts together", to find ways to dispel a "spell of brokeness" (Woolf, 1976, p.72). Husserl, Merleau Ponty, Werner and Vygotsky, all provide some guidance in this effort - to realize the wholistic metaphor. They also reflect some of the problems. This section of the paper will review their legacy, the methodological suggestions they make, the problems they evidence and some possible resolutions they pose.

I want to begin with Husserl. He invites me to return "back to the things themselves" (1965, p.20). Husserl reminds me that life cannot be studied <u>in vitro</u>, one has to explore it <u>in vivo</u> (Von Foerster, 1981, p. 258). He reminds me of my need to try to see clearly, to look again at the taken for granted. If there is anything that most of us take for granted, it is our assumption that our

bodies belong to us in the same way possessions belong to us. This assumption, so commonly held, leaves each of us' detached, or seemingly so, from ourselves and in a very strange sense permits us the luxury of "thingness". If Husserl calls me back to the body, my body and challenges me to look again, Merleau Ponty reminds me that the body, my body, your body is always central and active, always immediate. I must also remember that the body, my body is more than central, active and immediate, it is also particular. I cannot take a breath, think a thought, feel an emotion and deny this.

So I must look again at the body, my body, moving, acting, breathing. But if I am to know myself, the body, my body, I cannot forget that it is an understanding of the whole I am pursuing. I cannot allow myself to fall into a type of reductionism in which consciousness becomes the whole.

Werner offers me his statement that the whole is greater than the sum of its parts. This statement provides a way out of the confining circle dualism presents. In stating this principle, Werner acknowledges that we are not an "either/or", nor even a "both/and" but <u>something other</u>. He is acknowledging that no authentic separation is possible between thought and action. This must be an important point in developing a methodology that promotes my seeing myself as a living whole.

Vygotsky takes me a step further. Adapting freely from his comments, we have been unable traditionally to pose the body/mind question in a manner that would permit any real answer. One fault lies in the method of analysis adopted. Following his suggestion, the solution is not to focus on the parts, on the elements, but on "a unit" of analysis that retains all the basic properties of the whole and which cannot be further divided without losing them" (Vygotsky, 1934/1962, p.4). Vygotsky finds such a unit in word meaning for "it is in word meaning, that thought and speech unite into verbal thought" (1934/1965, p.5). In doing this, he offers an alternate approach to resolving the body/mind question, that of taking a new vantage view, of searching out a new starting point.

Both Werner and Vygotsky ask me to look at the living organism, the whole child - thinking, speaking, and acting in context. That Werner then goes on to talk about our being psychophysical unities or that Vygotsky gives life to an abstract concept (i.e. language), only indicates how careful I must be in speaking about myself - about the body, my body to speak correctly.

A review of these authors indicates that to realize the wholistic metaphor I must avoid certain ways of speaking. I cannot maintain a wholistic focus if I talk about the body, my body as an animated organism (Leib), as a lived body suffused, as it were by consciousness (Husserl, 1923/1959, p.60-61). To speak this way is to

make consciousness the agent, the activator, the energizer. The body, my body becomes something to be animated. To do this is to focus on the body, my body as an image, as something separate and apart. I cannot maintain such a focus if the body, my body is generalized, belonging to everyone and therefore to no one. To do this is to miss a most significant characteristic of the body, my body; that is, that the body, my body is the primary source of any sense of specificity and individuation (Stack, 1974, p. 271). Nor is this focus possible if I talk about the body, my body as a "psychophysical unity." (Werner, 1926/1948, p.41) To speak thus is to allow the parts to define the whole. If Werner's definition of the whole is to apply then this unity must represent something more, something different than, the co-existence of the physical and the psychical. The use of "psychophysical", the merging of these two words to imply a synthesis does little to suggest what that "more" might be. As well, Merleau Ponty (1945/1962) suggests that this kind of phrase cannot help but leave one asking who is the agent here and who does this unifying (p.237). Finally, I cannot maintain a wholistic focus if inanimate concepts such as language are made animate, and the body, my body becomes passive and invisible in consequence.

Having outlined what I must not do, what kinds of things must I do to better capture/realize the body, my body as a living whole? The review of Husserl, Merleau Ponty, Werner and Vygotsky makes clear that in order to realize the wholistic metaphor I must focus on, return to the body, my body and return to a sense of myself as a verb - being breathing, moving, always doing something. I must speak of the body, my body, your body as not only active but as particular, as personal, as somebody. To do this is to empower the body, my body, to recognize that I move and that no one else does it for me.

I must remember to focus on the whole, the body, my body not on a part (neither consciousness, nor language). To avoid talking about the body, my body, as either a series of parts, or as an object, a new "unit of analysis" may be in order.[1] To do this means acknowledging the body, my body as the essential context for understanding my own living nature.

This is the new direction promised at the outset. We have "arrived where we started", brought back to the point of beginning again.

Epilogue: My Body Revisited

Historically, the body, my body has been "soma", a physical object of flesh, bone and blood .... passive and receptive. I find myself thinking of Heidegger's statement that "Homelessness is coming to be the destiny of the

world" (Heidegger, 1977, p. 218) and wondering if this homelessness is in some small way due to the persuasiveness of the dualistic tradition.

Through my experience in dance, I know that the awakening of awareness, of how I move, in what manner; what my moving actually says to me about myself is essential to acknowledging that I live in motion, that my life centers in my body. I have demonstrated, at the very least suggested, that just as essential is an understanding of how language shapes both that acknowledgement and that awareness. I have reflected the reciprocity that exists between moving and speaking as co-constitutors of the world, my world, as expressions of life as I live it.

FOOTNOTES

Introduction

The question of dance and dancing is one of semantics but perhaps worth some thought. Those in the psychology of dance have suggested that one may have an experience in dance without dancing - if one takes the position that dance is art and not merely movements (Priddle, 1989).

Chapter I - The Body, My Body

1. Von Foerster (1972, 1974) has called the cybernetics of observed systems first order cybernetics (1st metalevel), that of observing systems second order (2nd metalevel). In this case we are talking about our talking about our talking (3rd metalevel).

2. In my remarks I shall not mean by "Cartesian inheritance" that philosophical doctrine identical with the philosophy of Descartes. Rather I shall use the term to refer to the beliefs about the body-mind dualism attributed to Descartes by popular culture. It is simply one of the ironies of the history of European philosophy that Descartes is not a "Cartesian."

3. Marcel (1927, p. 124) suggests that if we want to speak about "the body," we shall first have to indicate exactly what we mean by it. ("The idea 'body' is by no means one word for one thing.")

   Convention equates the body not with total being as I have done but with physicality. In this dissertation, to interpret the use of the term "body" in such a conventional manner would be to confuse levels of discourse.

4. In philosophy, form has had a variety of definitions. In this case, form is being used in a Aristotelian sense. For Aristotle, form normally existed only in combination with matter. Basically, therefore an Aristotalian form is that which makes an object what it is.

5. Since the time of Plato and before (Thomas, 1983), "the body" has been the subject of ongoing discussion which occurs in language. To refuse to use language clearly, and precisely is both to cease to participate in this discussion and to fail to acknowledge the form in which it takes place.

6.1. It should be acknowledged that the nature of language, as a philosophical inquiry, is a long-standing and unresolved search. Ryle (1949), Rorty (1980) and Israel (1981) represent and support my own endeavour to re-assess our ways of speaking about "the body." I am taking from them their suggestion that our queries ought to be prefaced by an examination of the language in which the discussion is to be couched. I draw freely on their negative criticisms but I wish to make clear that I am not intending to make use of their more positive directives. To repeat, I acknowledge that language plays a part in shaping discussion. Certainly, it encourages us not to pay attention to certain things, in this case, our bodies. I want to look at how it does that. I use the critiques of these commentators as a guide.

6.2 Words and their meanings are both fixed and fluid in nature, not unlike the wave and particle of light found in modern subatomic physics (Zukav, 1979). Nonetheless, it is critical for both researcher and reader to be aware of the words, and their cultural legacy as well as how they are used. Having this awareness, we can choose and build, where possible, what we intend or acknowledge what exactly prevents our doing so.

7. These commentators (in particular Ryle) have been accused of misrepresenting Descartes; this may well be true. Their comments are more appropriate as he has been understood by and passed into popular culture.

8.1 See Alberta Education's Developmental Framework for one example of the common tendency to split/to fracture the whole. (The Framework is made up of four documents - Students' Thinking: The Cognitive Domain (1987), Students' Interactions: The Social Sphere (1988), Student's Physical Growth, The Physical Dimension (1988) and an upcoming document on the interaction of these three aspects.)

8.2 Interestingly, having decided to fracture the whole - the possible parts become endless. Having looked at the growing child from a cognitive, social or physical perspective of one might look at the child's development creatively or spiritually. Of course, having fractured the whole, the question is, as with Humpty Dumpty, how do we ever put the pieces back together.

8.3 Needless to say, everytime one separates the consideration of the body, my body per se from other elements of one's own being, such as when one talks of mind, body, and spirit, for example, or even physical and cognitive functioning, one is objectifying the body, my body.

9. Bruner comments in this 1984 article that "Psychology continues to be embarrassed by mentalism" (p 8).

10. The tendency to think of the body as our physicality encourages us to think of our bodies as objects, as our personal possessions. The wonderful thing is that the body, my body, your body is not and never can be an object, no matter how we treat or speak of ourselves as such. (Confer with M. Whitehouse, "Tao of the Body," unpublished paper.)

11. At this point, "the body, my body" is a whole but a whole in a context, an interaction of body and space and movement.

FOOTNOTES

Chapter II - Wholism and My Body

1.1 Historically, wholism was initially advocated for the study of organic systems, but the concept has been taken over for the study of linquistic and other social systems. It appears occasionally in Greek and Roman literature (for example Aristotle's Politics (253a.d./1946, p. 18-28) and is one of the emphases for the Romantic movement (for Herder and Rousseau, for instance).

1.2 For example, Aristotle's Politics (253a.d./1946, p. 18-18).

> The state is by nature clearly prior to the family and to the individual, since the whole is of necessity prior to the part, for example, if the whole body be destroyed, there will be no foot or hand, except in an acquisitional sense, as we might speak of a stone hand; for when destroyed the hand will be no better than that. But things are defined by their working and power, and we ought not to say that they are the same when they no longer have their proper quality but only that they have the same name. The proof that the state is a creation of nature and prior to the individual is that the individual, when isolated, is not self-sufficing; and therefore he is like a part in relation to the whole.

2. Black (1954-55) set the stage for recent discussions of how we can understand metaphors by identifying three main theories (the first two of which are of the same kind).

: Substitution view: A metaphor of "A is B" form (e.g. Man is a wolf) is nothing but an indirect way of presenting some intended external meaning "A is C" (e.g. Man is fierce).

: Comparison view: A metaphor of the "A is B" form is a means of indirection by which at the speaker's intended external meaning "A is Like in the following respects ..."

: Interaction view: In the metaphor "A is B" (e.g. Man is a wolf), the "system of associated commonplace of A interacts with that of B to produce emergent metaphorical meaning. The point here is that understanding a metaphor is not typically a matter of comparing actual properties of objects; rather, it is based upon what the terms of the metaphor call to mind for us.

3. Johnson (1981) in "Introduction: Metaphor in the Philosophical Tradition" suggests that the problems of metaphor that have been of interest to philosophers, linguists and psychologists may be organized under three questions:

: What is it? This is the question of how to identify metaphors and how to separate them from both literal and non literal expressions.

: How does it work? This includes questions on creativity in language, the "mechanism" of metaphor, how it is processed etc.

: What is its cognitive status? Questions about the nature of metaphorical meaning, whether it is reducible to literal paraphrase, and what role it may play in various cognitive disciplines are found here.

4. Aristotle's seminal definition appears in The Poetics as part of his discussion of various types of nouns available to the poet:

> Metaphor consists in giving the thing a name that belongs to something else; the transference being either from genus to species, or from species to species, or on grounds of analogy.

5. Black has a good sense of this. He claims that, in some cases metaphors may more nearly create similarities between things, rather than merely suppress pre-existing ones.

See Black (1954-55, 1977)

6. The dashes are used intentionally for emphasis.

7. When we say a person is a saint, we are really talking about saint-likeness, we are still being metaphoric. Interestingly, almost all the words we use to describe ourselves are metaphoric.

8. As I have indicated, a metaphor is not actually true but it does disclose something true. Examining a collection of metaphors, of fragment partial truth, may be the only way we can ever come to understand a thing (Van de Pitte, personal communication, 1989).

   Morgan (1986) in his book, Images of Organization, offers the following ...

> When we look at our world with our two eyes we get a different view from that gained by using each eye independently. Each eye sees the same reality in a different way, and when working together the two combine to produce yet another way. Try it and see. I believe that the same process occurs when we learn to interpret the world through different metaphors. The process of framing and reframing itself produces a qualitatively different kind of understanding that parallels the quality of binocular vision. As we try and understand a phenomena a new depth of insight - emerges. The way of seeing itself transforms our understanding of the nature of the phenomenon (p. 340).

9. That we are slowly re-examining the machine metaphor suggests we can occasionally see beyond our metaphors.

   See K. Egan, "Metaphors in Collision: Objectives, Assembly Lines, Stories" Curriculum Inquiry, 18, 1988, p. 63-86.

10. Just ask yourself who or what we take the body to be when we perceive it as an immune system threatened on all sides even by its own functions or when the uterus no longer appears to be the unequivocal silent locus that perpetuates the species. At the intersection of the confusions of our lives and of the uneasy peregrinations of our thoughts, these questions among many others outline a picture of the contemporary body.

11. Feher (1989) in his introduction to Fragments of a History of the Human Body accounts for this variance by saying that the vital processes cannot fuel figures of thought without causing them to renew themselves, while concepts that attempt to reflect the living being cannot do so without constantly altering its direction. The human body affected by such interchanges is therefore transformed in response to the different strategies adopted by life and thought in order to carry through their respective plans - through and despite one another. The changes undergone by the body - sometimes acting as an obstacle to the intelligence and sometimes as its spring board, sometimes expressing the entire universe and sometimes disappearing completely as an autonomous entity - are therefore quite real.

FOOTNOTES

Chapter III - Phenomenology and My Body

1. Edmund Husserl (1859-1938)

Husserl was a German philosopher who took his doctorate in mathematics at the University of Vienna in 1882.

After staying with Brentano at the University of Vienna (1884-1886), Husserl abandoned mathematics and turned to philosophy. Eventually he brought about a radical change on the German philosophical scene by synthesizing in his phenomenology both the subjective and objective viewpoints in philosophy. Since the philosophically oriented psychologist is constantly aware of the objective-subjective or inside - outside problem, Husserl's philosophy influenced psychology, especially since he began to write at a time when dissatisfaction with introspection was beginning to find resolution in Wertheimer's Gestalt psychology and Watson's behaviorism.

Husserl is generally considered the father of the phenomenological movement. He published a series of books on phenomenology, beginning with the first volume of the three volume Logical Investigations in 1900 and concluding with Cartesian Meditations in 1931 and The Crisis of European Sciences and Transcendental Phenomenology in 1936. (After his death, the Husserl archives were founded to preserve his considerable legacy of unpublished manuscripts; more than twenty volumes of his collected works have appeared so far.)

2. Maurice Merleau Ponty (1908-1961)

Merleau Ponty was a French philosopher and phenomenological psychologist, recognized for his originality and success in integrating philosophy and psychology. His psychologically most important works are Structure du comportment (1942; English translation, The Structure of Behavior, 1963) and La phenomenologie de la perception (1945; English translation, Phenomenology of Perception, 1962). In The Structure of Behavior, Merleau Ponty proposed "to understood the relation between consciousness and nature." Although nature is subject to causality, consciousness is not, even when considered as behavior. The appropriate method for studying behavior is systematic phenomenology of perception, not the methods presently used by psychologists. In Phenomenology of

Perception, Merleau Ponty derived a perceptual basis for his phenomenological philosophy. The essential human characteristic is the dynamic interaction between consciousness and nature. This interaction or dialectic is reflected in the perceptual process.

3. Its aim as philosophy implies a radicalism of foundation, a reduction to absolve presuppositionlessness, a fundamental method through which the philosopher at the beginning secures an absolute foundation for himself.

Husserl. Ideen, Nachwort, Vol. 3, p. 160.

4. I have been through enough torments (Qualen) from lack of clarity and from doubt that wavers back and forth ... Only one need absorbs me: I must win clarity, else I cannot live; I cannot bear life unless I can believe that I shall achieve it.

"Personliche Aufzeichnungen." Ed. by W. Biemel, Philosophy and Phenomenological Research, XVI (1956), p. 297.

5.1 McKenna (1982) suggests that there is a unity to Husserl's work - a unity that results from repeated efforts to work a single personal and philosophical quest - out in concrete phenomenological analyses. The quest was to find the proper access to phenomenology and it occupied him extensively. This focus emerges not only because of the misunderstandings of his work which the earliest of his introductions, Ideas, occasions in the philosophical community, but also, and more importantly, because of his effort to achieve clarity for himself and to overcome his own naivete with respect to some of the central concepts and methods of his philosophy.

McKenna, William. Husserl's "Introductions to Phenomenology." The Hague: Martinus Nijhoff Publishers, 1982, Introduction, p. 1-5.

5.2 Ideas and Crisis are submitted "introductions" as is Cartesian Meditations: An Introduction to Phenomenology, trans. D. Cairns. The Hague: Martinus Nijhoff, 1960. The work referred to by Husserl as an "introduction" is Formal and Transcendental Logic, trans. D. Cairns. The Hague: Martinus Nijhoff, 1969.

6. To begin with we put the proposition: pure phenomenology is the science of pure consciousness. This means that pure phenomenology draws upon pure reflection exclusively, and pure reflection excludes as such every type of external experience ...

"Husserl's Inaugural Lecture", trans. R.W. Jordan, p.14.

Turning inwards in pure reflection, following exclusively "inner experience" (self-experience: and "empathy" to be more precise and setting aside all the psychophysical questions which relate to man as a corporeal being. I obtain an original and pure descriptive, knowledge of the psychical life as it is in itself.

"Author's Preface to the English Editions of Ideas," trans. W.R. Boyce Gibson, p.44.

> ... one first sets before oneself as a goal a science which deals ... with the invariant essential characteristics of a soul, of a psychic life in general.

"Author's Preface to the English Edition of Ideas", trans. W.R. Boyce Gibson, p.45.

7. Confer with Ideen, vol 1, pp. 134-136, 215-225, 363-380; Cartesianische Meditationen, pp.17-34; Die Krisis ..., pp 114-116, 146-151, 170-173, 182-193, 207-214.

8. The term "consciousness" is being used in different senses by different people. It can mean subjective awareness, for example when consciousness and unconscious activities are compared; but also self awareness which is the awareness of being aware. The term is also used by many to mean the totality of mind. Zaner (1970, p. 192) suggests that "consciousness is but a convenient substantial term referring to a concatential system of consciousings, by and through which what we call "I" or "self" achieves awareness" of that self and of its environs.

9. The psychical does not constitute a world for itself: it is given as an ego or as the experience of the ego (by the way, in a very different sense) and this sort of thing reveals itself empirically as bound to certain physical things called bodies.

Edmund Husserl, "Philosophy as Rigorous Science" in Phenomenology and the Crisis of Philosophy, trans. Q. Lauer. New York: Harper Row, 1965. p. 171.

Only by means of the experiential relation to the animate organism does consciousness become really human and animal (tierisch), and only thereby does it achieve a place in the space and in the time of nature.

Husserl, Ideen zu einer reinen Phanomenologie und Phaenomenlogischen Philosophie, Erstes Buch, M. Niemeyer (Halle a.d.s., 1913), p.103.

10. Confer with Spielberg. Phenomenology and Psychology vol 1, Chapter 1&2. Also confer with Barrett, 1978, p. 129-146.

11. While Husserl focuses on consciousness and does little analysis of the physical, there is some material on kinesthesia in his unpublished materials.

12. Zaner provides us with a good working definition of embodiment "the concrete experience of consciousness of its own animate organism (1964, p. 249).

13. According to Kolakowski, there is "no logical possibility of founding a non-idealistic epistemology within the phenomenological project" (1975, p.4).

14. As Merleau Ponty says "that actual body I call mine, this sentinel standing quietly at the command of my words and my acts."

The Primary of Perception, pp. 160-161.

The body is the vehicle of an indefinite number of symbolic systems whose intrinsic development definitely surpasses the signification in natural gestures, but would collapse if even the body ceases to promote their operation and install them in the world and our life.

Themes from the Lectures, "The Sensible World and Expression" p.9.

It is easy to miss Merleau Ponty's intent when he makes statements such as the above.

15a. Merleau Ponty, 1945/1962, Phenomenology of Perception, discussion can be found on p. 103 through 173 (p.103 is the first reference to the Goldstein and Gelb study, p. 108 is the earliest reference to Schneider).

15b. Merleau Ponty relies heavily on the results of studies dealing with pathological behavior - particularly those of Goldstein and Gelb pertaining to Schneider. He proceeds by examining the breakdown of some aspects of the body in order that the normal might be thrown into relief. Studying pathology is not, of course, the same as studying the healthy as commentators such as Maslow and Rutter have painfully pointed out.

15c. Schneider has suffered from a whole variety of disorders including visual, motor and intellectual disturbances. His brain was initially damaged by a shell and his general behavior manifests a persistent and structural form of pathology.

16. Traces of dualism remain even with this intent.

> ... there can be no question of analyzing the fact of birth as if a body-instrument had received from elsewhere a thought-pilot, or inversely as if an object called the body had mysteriously produced consciousness out of itself. We are not dealing here with two natures, one subordination to the other, but with a double nature.
>
> Merleau Ponty, Themes from The Lectures, "Nature and Logos: The Human Body", p.129,

FOOTNOTES

Chapter IV - General Systems Theory and My Body

1.1 Vygotsky in his efforts to productively study language and thought suggests that the analysis of verbal thinking into two separate, basically different elements precludes any study of the intrinsic relationship between language and thought. He suggests the correct methodology to use is"analysis into units." By unit he means a product of analysis which, unlike elements, retains all the basic properties of the whole and cannot be further divided without losing them. He suggests that in this case if we want to study the whole we must look at word meaning. As Vygotsky puts it "it is word meaning that thought and speech unite into verbal thought " (1934/1962, p.5).

1.2 Varela (1976) provides this example of systemic looking. If each time I say "Fido" my dog comes around, that Fido is a perturbation in its organization that produces a compensation, i.e. the locomotion of coming to me. That is how it is with all systems. Now it is system dependent in that its behavior will depend upon its organization. It is observer dependent upon the kind of perturbation that I throw at it, which depends on me. Therefore, my ability to see what its properties are is limited in what kinds of interactions I can have with it.

1.3 Jateson (1972) offers a classic example in discussion of schizophrenia. He suggests that schizophrenia is a special strategy a person invents in order to live in an unliveable situation. Such a person finds herself or himself facing a situation in which she or he can't win no matter what she or he does, this is called a double bind. For example, the double bind may be set up for a child by contradicting verbal and nonverbal messages either from one or from both parents with both kinds of messages implying punishment - a threat to the child's physical and/or emotional security.

1.4 The system's approach to choosing units for analysis has been used by a variety of researchers e.g. Gordon Pask (1975 a,b) in his theory of the p-individual, by Laing (1971) in his analysis of interpersonal relations, by Laszlo (1974) and/or Jantsch (1975) in work on world models, by Beer in his work on management, by Boulding (1974) in his work on economics and so on.

2. Heinz Werner (1890-1964)

Werner was a German-American psychologist who took his doctorate at the University of Vienna in 1914. His early monographs were about aesthetics and music. During a period at Wayne County Training School (1943-47) he studied feeblemindedness, publishing some thirty articles. His work proved influential in the field of mental retardation. Werner, however, acquired prominence in the field of developmental psychology. His most notable work in this field was Einfuhrung in die Entwicklungspsychologie (1926) whose English version (Comparative Psychology of Mental Development, 1940) saw several editions and was translated into other languages.

Although ideas about development include values placed on the developmental process, Werner believed that there are certain absolute, abstract, truths that can be stated about it. One of these truths he called the orthogenetic principle, development proceeds from that which is global, undifferentiated, and unarticulated to that which is differentiated, articulated and hierarchically integrated. Unlike many other developmental psychologists, Werner believed that development takes place along many different lines but not necessarily at the same level. Werner added to the developmental picture forms of functioning such as aesthetics, expressiveness and other "irrational" forms of knowing the world. The developed person has "mobility of operation" by having at his/her disposal more modes of knowing than the child. This includes the ability not only to function at a more differentiated level but to move backward in one's developmental level and deal with materials in an undifferentiated way. Werner believed that developmental psychology is a way of looking at all psychological phenomena and sought to encompass all behavioral phenomena in a comprehensive system.

In 1949, Werner and Seymour Kaplan formulated a sensory-tonic field theory of perception. The theory attempted to remedy a shortcoming of existing perceptual theories by incorporating the motor aspect of perception. It postulated the dynamic equivalence of sensory and tonic (motor) events and therefore an interaction and substitutionability between them. The theory assumed the existence of only one kind of energy in the organism, sensory-tonic, which manifests itself in various ways. Although the theory was only moderately productive of research, the demonstrations of the effects of motor events upon perception given by Werner and Wapner were impressive and led to further developments (e.g. Witkins work using the rod-and-frame

test, tilting room and tilting-chair experiments as well as the relationship between personality and styles of perception (field dependence and independence). Werner produced about seventy publications on perception while Chairman of the Psychology Department at Clark. During the four years between retirement and death, he published an additional twenty-five papers and a major book (Symbol Formation, 1963 with B. Kaplan)..

3. Leon Semenovich Vygotsky (1896-1934)

Vygotsky was a Russian psychologist who studied at First State University of Moscow between 1913 and 1917 under K.R. Kornilov.

There is a growing interest in his work. In the 1920's, Vygotsky together with Leont 'ev and Luria developed a thoroughly new conception of many important psychological problems. The core of his writings is the so called socio-historical or cultural-historical theory of the development of higher psychological processes.

Vygotsky dealt with the development of consciousness in the course of evolution and ontology. He considered the latter to be a qualitative change in the mind. Vygotsky emphasized the role of education in psychological development, insisting that instruction must keep ahead of development. He conducted some of the first studies on concept formation in school children. He developed a test that bears his name, designed to teach concept formation by having the subject group blocks according to different properties of the blocks. In his best known work, Mysl' i rech (1934; English translation, Thought and Language, 1962). Vygotsky considered the determining factor of a child's psychological development to be a social development, especially language development. During a child's mental development, mental functions not only grow but, in a complex system of interrelations, develop new mental functional systems. The main change-producing factor is speech. The meaning of a word changes as a child grows up, which, in turn, brings about changes in the child's mental structure.

Vygotsky also conducted psychopathological studies. He was one of the first psychologists to investigate conceptualization in schizophrenia. One of his main findings was that for schizophrenics, it is difficult, if not impossible, to use and understand metaphoric or figurative language. This finding forms the basis of a number of psychiatric diagnostic tests. Books written

by Vygotsky include: Pedagogictieskaya psikhologiya (1926), Pedologiya shkol'rogo Vozrasta (1928), Etyudy po istorii povederi ya (1930, with A.R. Luria), Pedologiya podrostka (1931) and Osnovy pedologii (1934). A complete bibliography of Vygotsky's works totals 186 items.

4. Ganzheit (whole, wholeness, completeness, entity) is derived from the notion of "das Ganze" (or the whole) and was introduced into psychology by F. Krueger. A totality as a function of space, time, or both space and time (a complex is referred to as "ein Ganzes" or "a whole" if the type, location and arrangement of the "components" are not accidental or random (as they are in aggregate), i.e. if the totality has a structure, and provided that there is a real relationship between the component factors.

   A whole is only "wholistic" or possesses "wholeness" if all that occurs in the whole is not dependent on the nature and combination of the individual parts but on the contrary ... where that which occurs in a part of the whole is determined by inner structural laws of this whole. Objects which have this wholistic total character tend also to possess features which cannot be detected in any of their isolated parts (wholistic or total characteristics). To this extent, wholes are also "super summative".

   The wholistic psychological theories, in particular those of the Leipzig school and that of Werner (1953) assume a genetic primacy of the non or insignificantly structured (complex, diffuse, continuous) whole over its structured (differentiated) realizations; this applies to both behavior and individual experience.

5. Like William Stern, Werner was critical of some crucial features of the Gestalt psychology of Koehler, Koffka, Wertheimer: the one-sided interest in articulated gestalten and neglect of the not-yet-articulated or states, in which affect, bodily impulse, the senses, perception, and conceptualization still form a diffuse unity.

6. Werner makes it clear that we gradually form "perceptual and conceptual" ways of knowing the outer world" when he says that

> ... the true mental or 'intellectual' aspect of the personality does not play any part in the motivations of the very young child. The infant does not experience a desire to solve some particular task confronting him. He moves rather because vital needs force him to move.

7. In an effort to be helpful to the reader, I offer one instance in which Werner speaks to such preservation

> ... primitive modes of behavior in the normal adult not only appear under certain extraordinary conditions, but are continually present as the basis of all mental being, and are of vital importance in supporting the highest forms of mentability (Werner, q926/194x, p.4).

8. In his introduction to Thought and Language, Bruner cites Vygotsky as saying at the very beginning of his career as a psychologist ...

> In that psychology ignores the problem of consciousness, it blocks itself off from access to the investigation of complicated problems of human behavior, and the elimination of consciousness from the sphere of scientific psychology has as its major consequence the retention of all the dualism and spiritualism of earlier subjective psychology.

See Bruner, J., "Introduction of Thought and Language," p. VI.

9. In learning to write, the child must disengage himself from the sensory aspect of speech and replace words by images of words.

Thought and Language, 1962, p. 98.

10. The sensitive reader will recognize that while Vygotsky takes the term, "egocentric speech" from Piaget, he is not using it in quite the way Piaget does.

11. Through their ideas on wholism, Werner and Vygotsky give us a tool to view ourselves in a cultural context. This tool allows us to acknowledge that we are in the world and always part of it - always interacting social beings. This interaction is seen as one in which the social world is the shaper and the individual the shaped. This interpretation allows us to acknowledge neither the nature of the individual nor their active shaping of the world. They seem to forget that as individuals we shape the tone of our participation in the world, and perhaps more importantly to this discussion, that each of us is something other than the sum of our parts.

12. The theory of autopoesis or self regulation was first developed in Chile in the 1960's and early 1970's by Maturana and Varela. The core works are Maturana and Varela (1980), which provides an excellent though very difficult and technical overview of concepts, and Varela (1979), which applies the theory to biology. Other useful exposition can be found in Varela (1975, 1976, 1984), Varela and Johnson (1976), Harries-Jones (1983, 1984) and Ulrich and Protest (1984). This theory, in the manner of general systems theory, seeks to unite and transcend discipline boundaries using the simple but remarkably powerful notions that all systems look at themselves and regulate their own functioning.

FOOTNOTES

Chapter V - My Body as a Living Whole

1. The suggestions taken from Husserl, Merleau Ponty, Werner and Vygotsky might indeed provide the parameters for such a unit.

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